INDEX OF AUTHORS, 1935.

A.

Achmatowicz, O., Lewi, (*Miss*) P., and Robinson, R., strychnine and brucine. Part XXXV. Hofmann degradation of dihydrobrucidine, 1685.

Achmatowicz, O., and Robinson, R., strychnine and brucine. Part XXXIV. Action of methyl sulphate on methoxymethyldihydro*neo*brucidine and similar bases in boiling benzene solution, 1291.

Adamson, D. W., and Kenner, J., preparation of diazomethane and its homologues, 286.

Adeney, W. E., obituary notice of, 1891.

Anantakrishnan, S. V., and Hughes, E. D., substitution in polycyclic systems. Part I. Nitration of fluorene and 9-bromofluorene, 1607.

Anantakrishnan, S. V., and Ingold, C. J., influence of substituents on additive reactivity of ethylene derivatives. Part II. Effects of catalysts on relative rates of addition of bromine. Part III. Further experiments on the addition of bromine in solution, 984, 1396.

Anderson, K. D., Crumpler, C. J., and Hammick, D. L., photochemical decomposition of nitroso*iso*propylacetone and β-nitroso-βε-dimethylhexane, 1679.

Anderson, K. D., and Hammick, D. L., kinetics of the depolymerisation of bimolecular nitroso*iso*propylacetone, 30.

Angus, W. R., Leckie, A. H., Le Fèvre, (*Mrs.*) C. G., Le Fèvre, R. J. W., and Wassermann, A., constitution of dimeric keten, 1751.

Appel, H., preparation of *l*-xylose, 425.

synthesis of coumarins by v. Pechmann's method, 1031.

Appel, H., and Robinson, R., transformation of *d*-catechin into cyanidin chloride, 426.

constitution of cyanomaclurin, 752.

Archbutt, L., obituary notice of, 859.

Armstrong, K. F., obituary notice of, 1892.

Arndt, F., Martin, G. T. O., and Partington, J. R., studies in dielectric polarisation. Part XII. Dipole moments and structure of thiopyrones and related compounds, 602.

Arndt, F., and Rose, J. D., relations between acidity and tautomerism. Part III. The nitro-group and the nitronic esters, 1.

Arnold, M. H. M. See **Bell, R. P.**

Ashworth, D. R. See **Chattaway, F. D.**

Askew, F. A., absorption spectra of polycyclic hydrocarbons. Part I. Alkyl-substituted phenanthrenes. Part II. Partially reduced derivatives of phenanthrene, etc., 509, 512.

Astbury, W. T., and Lomax, R., *X*-ray study of hydration and denaturation of proteins, 846.

Astin, S., Moulds, L. de V., and Riley, H. L., selenium dioxide, a new oxidising agent. Part V. Further oxidations, 901.

Atkinson, H. M., obituary notice of, 1327.

Ault, R. G., Haworth, W. N., and Hirst, E. L., preparation of *d*-mannuronic acid and its derivatives, 517.

acetone derivatives of methylglycosides, 1012.

Ault, R. G., Hirst, E. L., and Morton, R. A., absorption spectra in relation to the constitution of derivatives of isatin and carbostyril, 1653.

Ayling, E. E. See **Hinkel, L. E.**

Aynsley, E. E., Pearson, T. G., and Robinson, P. L., kinetics of the reaction between hydrogen and sulphur. Part I. Reaction at 265—350° and 290—820 mm., 58.

Aynsley, E. E., and Robinson, P. L., kinetics of the reaction between hydrogen and sulphur. Part II. (1) Formation and characteristics of the unimolecular layer of hydrogen sulphide on the glass surface. (2) Independence of the reaction of the presence of oxygen, moisture, and sulphur dioxide, 351.

B.

Bach, H. See **Weissberger, A.**

Backeberg, O. G., interaction between aromatic diamines and ethyl acetoacetate, 1568.

Baddeley, G., and Bennett, G. M., velocities of reaction of some β-arylethyl chlorides with potassium iodide, 1819.

Baddeley, G., Bennett, G. M., Glasstone, S., and Jones, B., polar effects of the halogens in aromatic combination, 1827.

Baddeley, G., and Kenner, J., meta-alkylation of aromatic hydrocarbons by the Friedel–Crafts reaction, 303.

Bahl, R. K., and Partington, J. R., lower oxides and sulphates of iodine, 1258.

Baird, D. K., Haworth, W. N., and Hirst, E. L., polysaccharides. Part XX. The molecular size of amylose and the relationship between amylose and starch, 1201.

Baker, H. B., obituary notice of, 1893.

Baker, J. W., reactions of methyl Δ^{β}-propene-$\alpha\alpha\beta$-tricarboxylate; example of three-carbon ring-chain prototropy involving a simple *cyclo*propane ring, 188.

Baker, J. W., and Nathan, W. S., mechanism of aromatic side-chain reactions with special reference to polar effects of substituents. Part III. Effect of unipolar substituents on critical energy and probability factors in interaction of benzyl bromide with pyridine and α-picoline in various solvents. Part IV. Mechanism of quaternary salt formation. Part V. Polar effects of alkyl groups, 519, 1840, 1844.

Baker, J. W., Nathan, W. S., and Shoppee, C. W., mechanism of aromatic side-chain reactions with special reference to polar effects of substituents. Part VI. Effects of *p*-alkyl substituents on prototropy in the methyleneazomethine system, 1847.

Baker, W., and Lothian, (*Miss*) O. M., studies in chelation. Part II. Stabilisation of Kekulé forms in *o*-hydroxyacetophenones, 628.

Baker, W., and Walker, *James*, some reactions of *o*-hydroxybenzylacetone, 646.

Baldwin, *W. C. G.*, **Wolfrom,** *M. L.*, and **Lowry,** *T. M.*, rotatory dispersion of organic compounds. Part XXV. Open-chain derivatives of arabinose, fructose, and fucose; optical cancellation in pentaacetyl μ-fructose, 696.

Baldwin, *W. C. G.* See also **Lowry,** *T. M.*

Balfour, *A. E.*, and **Riley,** *A. L.*, studies in graphite formation. Part I. Estimation of graphite, 1723.

Balson, *E. W.* See **Lawson,** *A.*

Bamford, *C. H.*, and **Norrish,** *R. G. W.*, primary photochemical reactions. Part VII. Photochemical decomposition of *iso*valeraldehyde and di-*n*-propyl ketone, 1504.

Banerji, *S. K.* See **Bardhan,** *J. C.*

Bardhan, *J. C.*, and **Banerji,** *S. K.*, derivatives of *bicyclo*[0:3:3]octane, 474.

terpene compounds. Part I. Preliminary synthetical investigations in the cadinene group, 476.

Bardhan, *J. C.*, **Banerji,** *S. K.*, and **Bose,** *M. K.*, terpene compounds. Part II. Experiments on synthesis of homo*apo*fenchocamphoric acid, 1127.

Barger, *G.*, **Seshadri,** *T. R.*, **Watt,** *H. E.*, and **Yabuta,** *T.*, alkaloids of *Senecio*. Part I. Retrorsine, 11.

Barlow, *W.*, obituary notice of, 1328.

Barnett, *A. J. G.* See **Rule,** *H. G.*

Barnett, *E. de B.*, action of maleic anhydride on diphenyl*iso*benzfuran, 1326.

Barnett, *E. de B.*, and **Campbell,** *N. R.*, condensation of naphthalene with phthalic anhydride, 1031.

Barnett, *E. de B.*, **Goodway,** *N. F.*, and **Lawrence,** *C. A.*, condensation of phthalic anhydride with *s*-octahydrophenanthrene, 1684.

Barnett, *E. de B.*, **Goodway,** *N. F.*, and **Weekes,** *E. V.*, studies in the anthracene series. Part X., 1102.

Barnett, *E. de B.*, and **Lawrence,** *C. A.*, derivatives of the di- and tetra-polymethylenoanthracenes. Part I., 1104.

Barr, *G.*, use of the logarithmic head correction in viscosimetry, 1793.

Barrett, *J. W.*, **Cook,** *A. H.*, and **Linstead,** *R. P.*, fused carbon rings. Part V. Synthesis of reduced dicyclic systems, 1065.

Barrett, *J. W.*, and **Linstead,** *R. P.*, fused carbon rings. Part IV. Further investigation of 0:3:3-*bicyclo*octanones in relation to the strain theory. Part VI. Optical activity connected with the presence of multiplanar rings, 436, 1069.

Barrow, *F.*, and **Ferguson,** *G. W.*, stereochemical relationships of some optically active amines and amino-acids. Part I. Configuration of valine, 410.

Barry, *W. J.*, and **McClelland,** *E. W.*, thionaphthenopyrazoles, 471.

Bassett, *H.*, and **Henry,** *A. J.*, formation of dithionate by oxidation of sulphurous acid and sulphites, 914.

Batty, *W. E.* See **Hodgson,** *H. H.*

Baxter, *G. P.*, **Hönigschmid,** *O.*, **Lebeau,** *P.*, and **Meyer,** *R. J.*, fifth report of the Committee on atomic weights of the International Union of Chemistry, 788.

Bell, *D. J.*, 3:6-dimethyl glucose, 175.

a new reaction of the dichloroacetyl group in derivatives of glucose, 1180.

improved preparation of diacetone-glucose, 1874.

Bell, *J. M.*, obituary notice of, 860.

Bell, *R. P.*, and **Arnold,** *M. H. M.*, a cryoscopic study of trichloroacetic acid and its hydrate in benzene and in dioxan solution, 1432.

Bell, *R. P.*, and **Wolfenden,** *J. H.*, association of water and deuterium oxide in dioxan solution, 822.

Bell, *R. P.* See also **Lidwell,** *O. M.*

Bennett, *G. M.*, **Brooks,** *G. L.*, and **Glasstone,** *S.*, dissociation constants of monohalogenated anilines and phenols, 1821.

Bennett, *G. M.*, and **Jones,** *B.*, velocities of reaction of substituted benzyl chlorides in two reactions of opposed polar types, 1815.

Bennett, *G. M.*, and **Reynolds,** *F. M.*, influence of variations in structure on reactivity of an alcohol with hydrobromic acid, 131.

Bennett, *G. M.*, and **Ynill,** *J. L.*, the crystal form of anhydrous citric acid, 130.

Bennett, *G. M.* See also **Baddeley,** *G.*

Bergmann, *E.*, dipole moment and molecular structure. Part XIV. 2:2′-Difluorobisdiphenyleneethylene, 987.

mechanism of polymerisation reactions. Part IV. α-Phenylbutadiene, 1359.

rearrangement of thiocyanates into *iso*thiocyanates, 1361.

Bergmann, *E.*, and **Corte,** *H.*, migration of allyl groups in the ethyl acetoacetate series, 1363.

Bergmann, *E.*, and **Hampson,** *G. C.*, dipole moment and molecular structure. Part XV. Spatial configuration of the allene system, 989.

Bergmann, *E.*, and **Hartrott,** *R.*, an unusual case of racemisation, 1218.

Bergmann, *E.*, and **Heimhold,** *H.*, rearrangement of methoxy-pyrimidines and -purines, 955.

rearrangement of allyl ethers in the purine series, with remarks on hydrogenation of allyl ethers, 1365.

Bergmann, *E.* See also **Weizmann,** *C.*

Bergmann, *F.* See **Weizmann,** *C.*

Bernal, *J. D.*, and **Crowfoot,** (*Miss*) *D.*, structure of some hydrocarbons related to the sterols, 93.

Bettley-Cooke, *H. V.*, obituary notice of, 1330.

Beynon, *J. H.* See **Hinkel,** *L. E.*

Bhalla, *D. C.*, **Mahal,** *H. S.*, and **Venkataraman,** *K.*, synthetical experiments in the chromone group. Part XVII. Action of sodamide on *o*-acyloxyacetophenones, 868.

Bigelow, *L. A.*, and **Rule,** *H. G.*, cyclisation of 1:9-benzanthrone-8-carboxylic acid to 8:11-ketobenzanthrone, and of dibenzanthronedicarboxylic acid to diketodibenzanthrone, 573.

Bigelow, *L. A.*, **Rule,** *H. G.*, and **Black,** *W. A. P.*, catalytic hydrogenation of diphenyl triketone. Part I., 83.

Black, *W. A. P.* See **Bigelow,** *L. A.*

Blackburn, *J. C.* See **Kipping,** *F. S.*

Blair, *R. D.*, chemistry of the caryophyllene series. Part IV. Clovene and clovenic acid, 1297.

Bloch, *B. M.*, and **Norrish,** *R. G. W.*, primary photochemical reactions. Part VIII. Quantum yield of the photolysis of methyl *n*-butyl ketone, 1638.

Blount, *B. K.*, the veratrine alkaloids. Parts I. and II., 122.

chemistry of insects. Part I. Wax of the felted beech coccus, 391

Blum-Bergmann, (*Mrs.*) *O.*, formation of the indene nucleus; phenylbenzylindenes, 1020.

7-methyl-4-*iso*propyl-1-hydrindone, 1030.

Blum-Bergmann, (*Mrs.*) *O.* See also **Weizmann,** *C.*

Boorman, *E. J.*, and **Linstead,** *R. P.*, investigations of the olefinic acids. Part XVI. Additive reactions and tautomeric changes of cyclic unsaturated acids, and analogous observations on α-methylpentenoic acids, 258.

Bose, *M. K.* See **Bardhan,** *J. C.*

Bowen, *E. J.*, light filters for the mercury lamp, 76.

Bradfield, *A. E.*, **Jones,** *E. R.*, and **Simonsen,** *J. L.*, syntheses in the sesquiterpene series. Part II. Condensation of ethyl oxalate and tetrahydrocarvone, 315.

Bradfield, *A. E.*, **Penfold,** *A. R.*, and **Simonsen,** *J. L.*, α- and β-santalols, 309.

Bramley, *A.*, obituary notice of, 1896.

Briscoe, *H. V. A.* See **King,** *A.*

Britton, *H. T. S.*, and **Dodd,** *E. N.*, physicochemical studies of complex formation involving weak acids. Part XII. Complex anions of cuprous and auric cyanides, 100.

Britton, *H. T. S.*, and **Jarrett,** *M. E. D.*, physicochemical studies of complex formation involving weak acids. Part XIII. Reactions of malonic acid with typical metallic bases. Part XIV. Complex formation between malonates of heavy metals and of sodium, 168, 1728.

Britton, *H. T. S.*, and **Williams,** *W. G.*, electrometric studies of the precipitation of hydroxides. Part XIII. Constitution of aqueous solutions of silver oxide in ammonia, mono-, di-, and tri-methylamine and -ethylamine, pyridine and ethylenediamine; with a note on the dissociation constants of the amines, 796.

Brooks, *G. L.* See **Bennett,** *G. M.*

Brown, *W. B.*, and **Farmer,** *E. H.*, unsaturated acids of natural oils. Part III. The highly unsaturated acid of the kernels of *Parinarium macrophyllum*. Part V. α- and β-Licanic acids, 761, 1632.

Burawoy, *A.*, and **Gibson,** *C. S.*, tribromogold, 217. the organic compounds of gold. Part IV. *n*-Propyl compounds, 219.

Burawoy, *A.*, **Gibson,** *C. S.*, and **Holt,** *S.*, the organic compounds of gold. Part V. Cyano-compounds; preliminary experiments on the production of alkyl radicals, 1024.

Burford, *S. F.*, obituary notice of, 1897.

Burney, *E. d'A.* See **Parkes,** *G. D.*

Burns, *R.*, **Jones,** *D. T.*, and **Ritchie,** *P. D.*, studies in pyrolysis. Part I. Pyrolysis of derivatives of α-acetoxypropionic acid, and related substances. Part II. Pyrolysis of derivatives of α-acetoxy*iso*butyric acid, and related substances, 400, 714.

Burton, *H.*, alkaline hydrolysis of the azlactones derived from certain *o*-nitrobenzaldehydes, 1265.

Burton, *H.*, and **Shoppee,** *C. W.*, anionotropic and prototropic changes in cyclic systems. Part V. The system derived from 1-hydroxyindene, 1156.

Bury, *C. R.*, and **Parry,** *G. A.*, densities of aqueous solutions of potassium acetate and laurate, 626.

Butler, *J. A. V.*, and **Ramchandani,** *C. N.*, solubility of non-electrolytes. Part II. Influence of the polar group on free energy of hydration of aliphatic compounds, 952.

Butler, *J. A. V.*, **Ramchandani,** *C. N.*, and **Thomson,** *D. W.*, solubility of non-electrolytes. Part I. Free energy of hydration of some aliphatic alcohols, 280.

Butler, *J. A. V.* See also **Orr,** *W. J. C.*

C.

Cahn, *R. S.* See **Mercer,** *D.*

Campbell, *N.*, and **Cooper,** *R. C.*, studies in the indole series. Part I. Derivatives of 2-phenylindole, 1208.

Campbell, *N. R.* See **Barnett,** *E. de B.*

Canning, *G.* See **Houston,** *J.*

Caulfield, *T. H.* See **Gibson,** *D. T.*

Cavell, *H. J.*, and **Sugden,** *S.*, planar configuration of diamagnetic nickel complexes. Part II., 621.

Chakravarti, *S. N.*, and **Swaminathan,** *M.*, new synthesis of 3:11-dimethoxyoxyprotoberberine, and syntheses of 2:3-methylenedioxy-11:12-dimethoxyoxyprotoberberine and 2:3:11:12-tetramethoxyoxyprotoberberine, 293.

Challenger, *F.*, and **Ellis,** *L.*, formation of organometalloidal compounds by micro-organisms. Part III. Methylated alkyl- and dialkyl-arsines, 396.

Chapman, *A. W.*, studies of the Beckmann change. Part III. Rearrangement of ketoxime hydrochlorides, 1223.

Chattaway, *F. D.*, **Ashworth,** *D. R.*, and **Grimwade,** *M.*, 3-carbethoxy-4-hydroxy-1-nitrotolylpyrazoles, 117.

Chattaway, *F. D.*, and **Irving,** *H.*, action of halogens upon arylhydrazones of unsaturated aldehydes, 90.

Chattaway, *F. D.*, and **Parkes,** *G. D.*, derivatives of 3 : 5-dihalogen-substituted anilines, 1005.

Chattaway, *F. D.*, and **Witherington,** *P.*, condensation of halogen-substituted aldehydes with nitromethane, 1178.

trichlorohydroxy-aliphatic amines, 1623.

Chesterman, *D. R.*, complex iron compounds. Part I. Formation and solvation of ferrous chloride in non-aqueous liquids, 906.

Chowdhury, *J. C.*, and **Peacock,** *D. H.*, resinols of the latex of *Holarrhena antidysenterica*, 1129.

Chowdhury, *J. C.* See also **Peacock,** *D. H.*

Christie, *E. W.*, **McKenzie,** *A.*, and **Ritchie,** *A.*, resolution of tertiary hydroxy-carboxylic acids, 153.

Clark, (*Miss*) *H. B.* See **Roberts,** *K. C.*

Clark, *L. M.*, and **Hunter,** *E.*, the system $CaCO_3$–$CaSO_4$–N_2O at 159° to 252°, and the effect of additions of sodium salts, 383.

Clemo, *G. R.*, and **Dickenson,** *H. G.*, action of selenium on compounds containing angular methyl groups, 735.

Clemo, *G. R.*, and **Macdonald,** *J. McL.*, formaldehyde method of detecting the vinyl group, 1294.

Clemo, *G. R.*, and **McIlwain,** *H.*, syntheses and molecular complexes in the phenazine series. Part II., 738.

Clemo, *G. R.*, and **McQuillen,** *A.*, experiments on hexadeuterobenzene. Part I., 851.

a micropyknometer method for density determinations, 1220.

octadeuteronaphthalene, 1325.

Clemo, *G. R.*, **Morgan,** *W. McG.*, and **Raper,** *R.*, the lupin alkaloids. Part VIII., 1743.

Clemo, *G. R.*, and **Raper,** *R.*, alkaloids of *Ulex europaeus*. Part I., 10.

Clutterbuck, *P. W.*, and **Reuter,** *F.*, reaction of periodic acid with α-ketols, α-diketones, and α-ketonealdehydes, 1467.

Coffey, *D. H.*, **Heilbron,** *I. M.*, **Spring,** *F. S.*, and **Wright,** *H. R.*, studies in the sterol group. Part XX. Partial reduction of fucosterol, 1205.

Cohen, *A.*, synthesis of compounds related to the sterols, bile acids, and œstrus-producing hormones. Part V. Synthesis of conjugated arylhexadienes, and their behaviour in the Diels–Alder reaction, 429.

Cohen, *A.*, and **Cook,** *J. W.*, substituted unsaturated cyclic ketones, 1570.

Cohen, *A.*, **Cook,** *J. W.*, and **Hewett,** *C. L.*, synthesis of compounds related to the sterols, bile acids, and œstrus-producing hormones. Part VI. Experimental evidence of the complete structure of œstrin, equilin, and equilenin. Part VII., 445, 1633.

Cohen, *J. B.*, obituary notice of, 1331.

Connolly, *J. M.*, and **Dyson,** *G. M.*, constitution and reactions of thiocarbonyl tetrachloride. Part II. Reaction with primary arylamines, phenols, and reducing agents, 679.

Consden, *R.*, and **Kenyon,** *J.*, substitution in arylsulphon-1- and -2-naphthalides, 1591.

action of bromine on 2- and 4-nitro-1-naphthylamines, 1596.

Cook, *A. H.* See **Barrett,** *J. W.*

Cook, *J. W.*, and **Dansi**, *A.*, synthesis of polyterpenoid compounds. Part I. Preliminary experiments, 500.
Cook, *J. W.*, **Dansi**, *A.*, **Hewett**, *C. L.*, **Iball**, *J.*, **Mayneord**, *W. V.*, and **Roe**, (*Miss*) *E.*, polycyclic aromatic hydrocarbons. Part XIII. Condensed fluorene derivatives, 1319.
Cook, *J. W.*, and **Haslewood**, *G. A. D.*, synthetic uses of *as*-octahydrophenanthrene. Part I., 767.
a convenient synthesis of cholanthrene, 770.
Cook, *J. W.*, **Haslewood**, *G. A. D.*, and **Robinson**, (*Mrs.*) *A. M.*, synthesis of cholanthrene, 667.
Cook, *J. W.*, and **Lawrence**, *C. A.*, synthesis of polyterpenoid compounds. Part II., 1637.
Cook, *J. W.* See also **Cohen**, *A.*
Cook, *R. P.*, and **Robinson**, *P. L.*, certain physical properties of cyanogen and its halides, 1001.
Cooper, *H.*, obituary notice of, 1898.
Cooper, *R. C.* See **Campbell**, *N.*
Corte, *H.* See **Bergmann**, *E.*
Coughtrey, *W. C. J.* See **Taylor**, *T. W. J.*
Coulson, *E. A.*, homologues of naphthacene. Part II. 2-Methyl- and 2:7-dimethyl-naphthacene: synthetic applications of 2:6- and 2:7-dimethyl-1:2:3:4-tetrahydronaphthalene, 77.
Cowley, *E. G.*, and **Partington**, *J. R.*, studies in dielectric polarisation. Part XIII. Dipole moments of the simpler aliphatic nitriles, 604.
Cox, *E. G.*, **Goodwin**, *T. H.*, and **Wagstaff**, (*Miss*) *A. I.*, crystalline structure of the sugars. Part I. Simple sugars and glycosides: preliminary data. Part II. Methylated sugars and the conformation of the pyranose ring, 978, 1495.
Cox, *E. G.*, **Pinkard**, *F. W.*, **Wardlaw**, *W.*, and **Webster**, *K. C.*, planar configuration for quadricovalent nickel, palladium, and platinum, 459.
Cox, *E. G.*, **Wardlaw**, *W.*, and **Webster**, *K. C.*, planar configuration for quadricovalent nickel, palladium, and platinum: dithio-oxalate derivatives, 1475.
Cox, *E. G.*, and **Webster**, *K. C.*, planar structure of quadricovalent cupric compounds, 731.
Cristaldi, *G. G.*, obituary notice of, 860.
Cross, *C. F.*, obituary notice of, 1337.
Crowfoot, (*Miss*) *D.* See **Bernal**, *J. D.*, and **Mann**, *F. G.*
Crumpler, *C. J.* See **Anderson**, *K. D.*
Cullinane, *N. M.*, and **Padfield**, *H. J. H.*, investigations in the diphenylene oxide series. Part V., 1131.
Cunningham, *J. P.* See **Rule**, *H. G.*
Curd, *F. H.*, and **Robertson**, *A.*, lichen acids. Part VI. Constituents of *Ramalina scopulorum*, 1379.
Cusa, *N. W.* See **Kipping**, *F. S.*

D.

Dakin, *H. P.*, **Fairbrother**, *F.*, and **Stubbs**, *A. E.*, studies in electro-endosmosis. Part VII. Some measurements with non-aqueous liquids and high voltages, 1229.
Dansi, *A.* See **Cook**, *J. W.*
Davies, *C. W.*, the reaction of malonic acids with metallic bases, 910.
Davies, *C. W.* See also **Macdougall**, *G.*
Davies, *D. G.*, specific heats of *iso*butyric acid–water mixtures at 15°, 1166.
Davies, *W. C.*, mesityldimethylphosphine, 462.
Davies, *W. C.*, and **Walters**, *W. P.*, the constitution of some additive compounds of tertiary phosphines, 1786.
Davies, *W. H.*, **Heilbron**, *I. M.*, **Jones**, *W. E.*, and **Lowe**, *A.*, studies in the synthesis of vitamin-*A*. Part I., 584.
Day, *T. C.*, obituary notice of, 1340.
Denham, *H. G.*, and **King**, *W. E.*, the ternary system: stannous oxide–sulphur trioxide–water, 1251.
Denton, *J.*, obituary notice of, 407.
De Worms, *C. G. M.* See **Roberts**, *K. C.*
Dey, *A. N.*, and **Linstead**, *R. P.*, the supposed isolation of a second form of ββ-dimethyl*cyclo*hexanone; ring rearrangement during Clemmensen reduction, 1063.
Dickenson, *H. G.* See **Clemo**, *G. R.*
Dippy, *J. F. J.*, **Watson**, *H. B.*, and **Williams**, *F. R.*, chemical constitution and the dissociation constants of monocarboxylic acids. Part IV. A discussion of the electrolytic dissociation of substituted benzoic and phenylacetic acids in relation to other side-chain processes, 346.
Dippy, *J. F. J.*, **Williams**, *F. R.*, and **Lewis**, *R. H.*, chemical constitution and the dissociation constants of monocarboxylic acids. Part III., 343.
Dippy, *J. F. J.* See also **Hinkel**, *L. E.*
Dixon, *B. E.*, rhodium hydroxopentammines, 779.
Dodd, *E. N.* See **Britton**, *H. T. S.*
Donald, *C.*, and **Reade**, *T. H.*, action of nitrous acid on tertiary amines: influence of acidity, 53.
Dorée, *C.*, and **Petrow**, *V. A.*, hydrogenation under the action of selenium. Part I. The action of selenium on cholesterol at 230°, 1391.
Dovey, *W. C.*, and **Robinson**, *R.*, triarylpyrylium borofluorides, 1389.
Dovey, *W. C.* See also **Rowe**, *F. M.*
Drew, *H. D. K.*, and **Landquist**, *J. K.*, mixed melting points in eutropic series, 1480.
Drew, *H. D. K.*, and **Tress**, *H. J.*, plato- and platidiammines containing methylamine, 1212.
Wolffram's red salt and the possibility of tervalent platinum, 1244.
the red and green form of Magnus's salt, 1586.
Drumm, *P. J.* See **Reilly**, *J.*
Dunbar, *A.* See **Rule**, *H. G.*
Dyke, *W. J. C.*, and **King**, *H.*, constitution of sulpharsphenamine. Part II. A new interpretation, 805.
sulpharsphenamine; a new method of preparation, 1745.
Dyson, *G. M.* See **Connolly**, *J. M.*
Dyson, *R. J. H.* See **Hodgson**, *H. H.*

E.

Earl, *J. C.*, and **Mackney**, *A. W.*, action of acetic anhydride on *N*-nitrosophenylglycine and some of its derivatives, 899.
Earp, *D. P.*, and **Glasstone**, *S.*, dielectric polarisation and molecular-compound formation in solution. Parts I. and II., 1709.
Elkins, (*Miss*) *M.*, and **Hunter**, *L.*, the azo-group as a chelating group. Part I. Metallic derivatives of *o*-hydroxyazo-compounds, 1598.
Ellingham, *H. J. T.* See **Monk**, *R. G.*
Elliott, *R. L.* See **Hodgson**, *H. H.*
Ellis, *L.* See **Challenger**, *F.*
Emeléus, *H. J.*, and **Jolley**, *L. J.*, kinetics of the thermal decomposition of methylamine, 929.
photochemical decomposition of methylamine and ethylamine, 1612.
Emeléus, *H. J.*, and **Stewart**, *K.*, oxidation of the silicon hydrides. Part I., 1182.
Evans, *D. P.*, **Morgan**, *V. G.*, and **Watson**, *H. B.*, influence of nuclear substituents upon side-chain reactions. Part II. Factors controlling the velocities of acid-catalysed prototropy of nuclear-substituted acetophenones. Part IV. Reconsideration of the quantitative relationship between energies of activation and dipole moments, 1167, 1174.
Evans, *D. P.* See also **Jones**, *W. J.*

Evans, *W. J.*, and **Smiles**, *S.*, a rearrangement of *o*-acetamido-sulphones and -sulphides, 181.
derivatives of *o*-thioldiphenylamine, 1263.
Everett, *J. G.*, trypanocidal activity and chemical constitution. Part IV. Derivatives of benziminazole-5-arsonic acid, 155.
Eyre, *J. V.*, unicellular chemistry; the part played by external influences in determining the chemical character and biological behaviour of unicellular organisms, 201.

F.

Fairbrother, *F.*, and **Stubbs**, *A. E.*, studies in electro-endosmosis. Part VI. The "bubble-tube" method of measurement, 527.
Fairbrother, *F.* See also **Dakin**, *H. P.*
Farmer, *E. H.*, and **Paice**, *E. S.*, unsaturated acids of natural oils. Part IV. The highly unsaturated acid of *Telfairia occidentalis*, 1630.
Farmer, *E. H.*, and **Sunderland**, *E.*, unsaturated acids of natural oils. Part II. The highly unsaturated acid of the kernels of *Parinarium laurinum*, 759.
Farmer, *E. H.* See also **Brown**, *W. B.*
Fenton, *P.*, obituary notice of, 1340.
Ferguson, *G. W.* See **Barrow**, *F.*
Finch, *G. I.*, cathodic combustion of hydrogen and carbonic oxide, 32.
Fletcher, *C. J. M.*, and **Hinshelwood**, *C. N.*, kinetics of the decomposition of diphenyliodonium iodide, 596.
Follows, *H.*, obituary notice of, 1341.
Francis, *E. M.*, and **Simonsen**, *J. L.*, derivatives of naphthalomethylimide, 496.
Frewing, *J. J.* See **Thompson**, *H. W.*
Friedmann, *E.*, 4-methoxycinnamylidenepyruvic acid, 1053.
Friend, *J. N.*, the nitrates of lanthanum, and their solubilities in water, 824.
the nitrates of neodymium and praseodymium, and their solubilities in water, 1430.
Friend, *J. N.*, and **Wheat**, *W. N.*, solubilities of the double magnesium nitrates of the cerium group, 356.

G.

Galbraith, *F.*, and **Smiles**, *S.*, rearrangement of *o*-hydroxysulphones. Part V., 1234.
Gamble, *D. J. C.*, and **Kon**, *G. A. R.*, syntheses of polycyclic compounds related to the sterols. Part III. 9-Methyl- and 3′:9-dimethyl-*cyclo*pentenophenanthrene, 443.
Gamble, *D. J. C.*, **Kon**, *G. A. R.*, and **Saunders**, *B.*, syntheses of polycyclic compounds related to the sterols. Part IV. Identification of 3′-methyl-1:2-*cyclo*pentenophenanthrene and its preparation from cholesterol, 644.
Garforth, *B.*, and **Pyman**, *F. L.*, 4(5)-β-alkylaminoethylglyoxalines, 489.
Garforth, *B.* See also **Rowe**, *F. M.*
Garner, *W. E.*, and **Pollard**, *F. H.*, catalytic effect of hydrogen on the carbon monoxide flame, 144.
Garner, *W. E.*, and **Southon**, *W. R.*, nucleus formation on crystals of nickel sulphate heptahydrate, 1705.
Garner, *W. E.*, and **Veal**, *F. J.*, the thermocouple vacuum calorimeter, 1436.
the heat of adsorption of gases on zinc oxide and ZnO–Cr_2O_3 at low pressures and room temperatures, 1487.
Gattiker, *D. C.* See **Mann**, *F. G.*
Gent, *W. T.*, obituary notice of, 861.
German, *W. L.*, **Jeffery**, *G. H.*, and **Vogel**, *A. I.*, dissociation constants of organic acids. Part XIII. Primary and secondary constants of some cyclic 1:1-dicarboxylic acids, 1624.
German, *W. L.*, and **Vogel**, *A. I.*, dissociation constants of organic acids. Part XII. A new buffer: phenylacetic acid–sodium phenylacetate, 912.
Gibbs, *E. M.* See **Henry**, *T. A.*
Gibson, *C. S.* See **Burawoy**, *A.*
Gibson, *D. T.*, and **Caulfield**, *T. H.*, microvolumetric determination of methoxyl, 1419.
Gillan, *J. G.* See **Rowe**, *F. M.*
Gillieson, *A. H. C. P.*, **Kermack**, *W. O.*, and **Spragg**, *W. T.*, conversion of 3-nitro-4-methylphenylarsonic acid into 3-amino-4-carboxyphenylarsonic acid by intramolecular dismutation, and the action of hydrobromic acid on *m*-arsanilic acid and 3-amino-4-carboxyphenylarsonic acid, 470.
Glasstone, *S.* See **Baddeley**, *G.*, **Bennett**, *G. M.*, and **Earp**, *D. P.*
Gleave, *J. L.*, **Hughes**, *E. D.*, and **Ingold**, *C. K.*, mechanism of substitution at a saturated carbon atom. Part III. Kinetics of the degradations of sulphonium compounds, 236.
Gomm, *A. S.*, and **Hill**, *D. W.*, reactions of *o*-hydroxybenzylidenediacetophenones. Part V. Functional group reactions of salicylidenediacetophenone, 1118.
Goodson, *J. A.*, modified cinchona alkaloids. Part III. Chlorodihydro-bases, 1094.
Goodway, *N. F.* See **Barnett**, *E. de B.*
Goodwin, *T. H.* See **Cox**, *E. G.*
Goss, *F. R.*, dipole moments of associated liquids, 502.
factors modifying the polarisation of liquids, 727.
Graham, *H.* See **Houston**, *J.*
Gratton, *G.*, and **Ramage**, *G. R.*, electrolytic reduction of αα′-dicyano-ββ-dimethylglutarimide, 539.
Gratton, *G.*, and **Simonsen**, *J. L.*, Snitter's camphenilene, 1621.
Graymore, *J.*, action of benzoyl chloride and of hydrogen sulphide on cyclic methyleneamines, 865.
Grieve, *W. S. M.*, and **Hey**, *D. H.*, oxidation of 2- and 4-nitro-4′-methyldiphenyl with chromyl chloride, 114.
rate of decomposition of some *p*-substituted nitrosoacetanilides in benzene, 689.
Griffith, *C. F.* See **Robertson**, *G. J.*
Griffiths, *D. C.* See **Jones**, *W. J.*
Grimwade, *M.* See **Chattaway**, *F. D.*
Groves, *L. G.*, and **Sugden**, *S.*, dipole moments of vapours. Part II., 971.
Gulland, *J. M.*, and **Mead**, *T. H.*, equilibria between amino-acids and aromatic aldehydes. Part I., 210.
Gulland, *J. M.*, and **Morris**, *C. J. O. R.*, canavanine, 763.
Gulwell, *T.* See **Jones**, *W. J.*

H.

Hammick, *D. L.*, and **Sixsmith**, *G.*, complex formation between polynitro-compounds and aromatic hydrocarbons. Part I. Finite reaction rates, 580.
Hammick, *D. L.*, and **Williams**, *R. B.*, complex formation between polynitro-compounds and aromatic hydrocarbons. Part II. The system 2:4-dinitro-2′-methyldiphenyl-6-carboxylic acid–benzene, 1856.
Hammick, *D. L.*, and **Wilmut**, *H. F.*, the parachors of ethyl orthoformate and triphenylmethane, 207.
Hammick, *D. L.* See also **Anderson**, *K. D.*
Hampson, *G. C.* See **Bergmann**, *E.*

Hardie, *T.*, and **Mair**, *J. A.*, action of zinc dust and alcohol on the hydrochlorides of gutta-percha and balata, 1239.
condensation of balata bromide with phenols and phenolic ethers, 1242.
Harding, *V. J.*, obituary notice of, 1341.
Hardwick, *P. J.*, interaction of alkyl iodides and sodium *m*-4-xylyloxide in ethyl alcohol, 141.
Harris, *P. L.*, and **Smith**, *J. C.*, addition of hydrogen bromide to non-terminal double bonds; *iso*-undecenoic acid, 1108.
addition of hydrogen bromide to triple and to double bonds; undecynoic, undecenoic, and 10:11-epoxyundecoic acids, 1572.
Harris, *R. M.*, and **Smith**, *J. C.*, *n*-propyl and *n*-butyl gallate, 1220.
Harris, *T. L.*, **Hirst**, *E. L.*, and **Wood**, *C. E.*, optical rotatory dispersion in the carbohydrate group. Part VI. The amide rotation rule, 1658.
Hartrott, *R.* See **Bergmann**, *E.*
Hartshorne, *N. H.*, **Walters**, *G. S.*, and **Williams**, *W. O. M.*, studies in polymorphism. Part III. The linear velocity of the transformation of α- into β-*o*-nitroaniline, 1860.
Hasan, *C.*, and **Hunter**, *R. F.*, the unsaturation and tautomeric mobility of heterocyclic compounds. Part VII. Selenazole derivatives, 1762.
Haskelberg, *L.* See **Weizmann**, *M.*
Haslewood, *G. A. D.*, and **Roe**, (*Miss*) *E.*, hydrocarbons from *neo*ergosterol, 465.
Haslewood, *G. A. D.* See also **Cook**, *J. W.*
Haworth, *R. D.*, and **Richardson**, *T.*, constituents of guaiacum resin. Part III. Synthesis of *dl*-guaiaretic acid diethyl ether, 120.
constituents of natural phenolic resins. Part I. Matairesenol, 633.
Haworth, *R. D.*, **Richardson**, *T.*, and **Sheldrick**, *G.*, constituents of natural phenolic resins. Part III. Synthesis of dehydro-"sulphite-liquors lactone" dimethyl ether and some observations on the structure of podophyllotoxin, 1576.
Haworth, *R. D.*, and **Sheldrick**, *G.*, constituents of natural phenolic resins. Part II. "Sulphite-liquors lactone," 636.
Haworth, *W. N.*, **Hirst**, *E. L.*, and **Plant**, (*Miss*) *M. M. T.*, polysaccharides. Part XXI. Constitution and chain-length of some starch dextrins, 1214.
Haworth, *W. N.*, **Hirst**, *E. L.*, and **Waine**, *A. C.*, polysaccharides. Part XXII. Constitution and molecular structure of α-amylodextrin, 1299.
Haworth, *W. N.*, **Hirst**, *E. L.*, and **Woolgar**, (*Mrs.*) *M. D.* polysaccharides. Part XIX. Molecular structure of waxy maize starch, 177.
Haworth, *W. N.* See also **Ault**, *R. G.*, and **Baird**, *D. K.*
Heilbron, *I. M.*, **Spring**, *F. S.*, and **Stewart**, *P. A.*, studies in the sterol group. Part XXI. Lumisterol, 1221.
Heilbron, *I. M.* See also **Coffey**, *D. H.*, and **Davies**, *W. H.*
Heimhold, *H.* See **Bergmann**, *E.*
Henry, *A. J.* See **Bassett**, *H.*
Henry, *T. A.*, and **Sharp**, *T. M.*, 2-iodo-3-hydroxybenzoic acid, 856.
Henry, *T. A.*, **Solomon**, *W.*, and **Gibbs**, *E. M.*, modified cinchona alkaloids. Part II. Action of sulphuric acid on quinine and quinidine, 966.
Herbert, *R. W.*, **Hirst**, *E. L.*, **Samuels**, *H.*, and **Wood**, *C. E.*, optical rotatory dispersion in the carbohydrate group. Part V. Tetramethyl γ-gluconolactone, 295.
Hewett, *C. L.* See **Cohen**, *A.*, and **Cook**, *J. W.*
Hey, *D. H.*, action of aromatic aldehydes on benzene and toluene in presence of aluminium chloride, 72.
Hey, *D. H.* See also **Grieve**, *W. S. M.*
Hey, *M. H.*, interpretation of the dissociation pressures of the palladium–hydrogen system, 1254.
Heyes, *R. G.*, and **Robertson**, *A.*, experiments on the synthesis of rotenone and its derivatives. Part V. Constitution of *apo*toxicarol, 681.
Hickinbottom, *W. J.*, reactions of unsaturated compounds. Part IV. Addition of aniline to olefins, 1279.
Hilditch, *T. P.*, and **Rigg**, *J. G.*, experiments on the direct esterification of higher fatty acids with glycerol and with ethylene glycol, 1774.
Hill, *D. W.*, reactions of *o*-hydroxybenzylidenediacetophenones. Part II. Conversion into pyrylium and benzopyrylium salts. Part IV. Unsymmetrical 1:5-diketones, 85, 1115.
Hill, *D. W.*, and **Melhuish**, *R. R.*, reactions of *o*-hydroxybenzylidenediacetophenones. Part III. Formation of a 4-phenacylideneflavene during the preparation of 4′-methoxyflavylium chloride, 88.
structure of flavylium salts, 1161.
Hill, *D. W.* See also **Gomm**, *A. S.*
Hill, *P.*, and **Short**, *W. F.*, hydrolytic fission of aromatic ketones by acids, 1123.
Hinkel, *L. E.*, **Ayling**, *E. E.*, and **Beynon**, *J. H.*, studies on hydrogen cyanide. Part V. Reactions of iminoformylcarbylamine, 674.
N-benzhydryl-*N*′-arylformamidines, 1219.
Hinkel, *L. E.*, **Ayling**, *E. E.*, and **Dippy**, *J. F. J.*, substituted phenyldihydroresorcinols, 539.
Hinkel, *L. E.*, **Ayling**, *E. E.*, and **Morgan**, *W. H.*, substituted aromatic aldehydes in Hantzsch's pyridine condensation. Part IV. Derivatives of 3:4-dihydroxybenzaldehyde, 816.
Hinshelwood, *C. N.*, reaction of hydrogen chloride with methyl alcohol, 599.
considerations concerning the mechanism of chemical reactions, 1111.
Hinshelwood, *C. N.*, and **Legard**, *A. R.*, factors determining the velocity of reactions in solution; molecular statistics of the esterification of carboxylic acids, 587.
polar and non-polar effects in esterification, 1588.
Hinshelwood, *C. N.* See also **Fletcher**, *C. J. M.*, and **Winkler**, *C. A.*
Hirst, *E. L.* See **Ault**, *R. G.*, **Baird**, *D. K.*, **Harris**, *T. L.*, **Haworth**, *W. N.*, and **Herbert**, *R. W.*
Hirst, *F. B.*, obituary notice of, 1344.
Hodgson, *H. H.*, and **Batty**, *W. E.*, metallic derivatives of 2-nitroso-5-methoxy- and of 3-chloro-2-nitroso-5-methoxy-phenol, 1617.
Hodgson, *H. H.*, and **Dyson**, *R. J. H.*, bromination of resorcinol monobenzoate and nitration of 4:6-dibromoresorcinol 3-benzoate; an example of group migration, 946.
Hodgson, *H. H.*, and **Elliott**, *R. L.*, salt formation of homonuclear naphthalene derivatives, 1850.
Hodgson, *H. H.*, and **Smith**, *E. W.*, mononitration of α-naphthol and of α-naphthyl methyl ether, and the monoreduction of 2:4-dinitro-α-naphthol, 671.
estimation and purification of β-naphthylamine in the presence of α-naphthylamine, and properties of some sulphonyl derivatives, 1854.
Hodgson, *H. H.*, and **Walker**, *John*, tetrazotisation of aryl diamines with special reference to *o*-phenylenediamine, 530.
Hönigschmid, *O.* See **Baxter**, *G. P.*
Hofeditz, *W.* See **Paneth**, *F. A.*
Hollens, (*Miss*) *W. R. A.*, and **Spencer**, *J. F.*, magnetic susceptibility of cadmium compounds, 495.
Holmes, *G. M.* See **Patterson**, *T. S.*
Holroyd, *G. W. F.*, obituary notice of, 407.
Holt, *S.* See **Burawoy**, *A.*

Hooper, *E. G.*, obituary notice of, 1899.
Houston, *J.*, **Canning**, *G.*, and **Graham**, *H.*, relation between general absorption and residual affinity: heterocyclic compounds, 965.
Hsü, *S. K.*, **Ingold**, *C. K.*, and **Wilson**, *C. L.*, optical activity in relation to tautomeric change. Part V. Kinetic status of ionic intermediates in prototropy, 1778.
Hughes, *E. D.*, mechanism of substitution at a saturated carbon atom. Part V. Hydrolysis of *tert.*-butyl chloride, 255.
Hughes, *E. D.*, and **Ingold**, *C. K.*, mechanism of substitution at a saturated carbon atom. Part IV. A discussion of constitutional and solvent effects on the mechanism, kinetics, velocity, and orientation of substitution, 244.
Hughes, *E. D.*, **Juliusburger**, *F.*, **Masterman**, *S.*, **Topley**, *B.*, and **Weiss**, *J.*, aliphatic substitution and the Walden inversion. Part I., 1525.
Hughes, *E. D.*, and **Kuriyan**, *K. J.*, influence of poles and polar linkings on the course pursued by elimination reactions. Part XXIII. Stable derivatives of the tercovalent-carbon compound of Ingold and Jessop, 1609.
Hughes, *E. D.* See also **Anantakrishnan**, *S. V.*, and **Gleave**, *J. L.*
Hunter, *E.* See **Clark**, *L. M.*
Hunter, *L.* See **Elkins**, (*Miss*) *M.*
Hunter, *R. F.*, and **Parken**, *E. R.*, the unsaturation and tautomeric mobility of heterocyclic compounds. Part VI. Mobility of 5-substituted 1-hydroxybenzthiazoles and the ultra-violet absorption of mobile and static derivatives of 1-hydroxybenzthiazole, 1755.
Hunter, *R. F.* See also **Hasan**, *C.*

I.

Iball, *J.* See **Cook**, *J. W.*
Ichaporia, *M. B.* See **Shah**, *R. C.*
Illingworth, *J. W.*, and **Keggin**, *J. F.*, identification of the 12-heteropoly-acids and their salts by means of *X*-ray powder photographs, 575.
Ing, *H. R.*, alkaloids of *Anagyris foetida*. Part II, 1053.
Ingold, *C. K.*, and **Mohrhenn**, *H. G. G.*, electrometric titration curves of dibasic acids. Part V. Dissociation constants of *cyclo*pentanedicarboxylic acids; an attempted check on methods proposed for calculation of molecular dimensions, 949.
mechanism of, and constitutional factors controlling, the hydrolysis of carboxylic esters. Part VII. *cyclo*Pentanedicarboxylic esters; attempted check on the calculation of molecular dimensions, 1482.
Ingold, *C. K.*, and **Rogers**, *M. A. T.*, modes of addition to conjugated unsaturated systems. Part VIII. Reduction of α-vinylcinnamic acid, 717.
influence of poles and polar linkings on the course pursued by elimination reactions. Part XXII. Wagner rearrangement in the Hofmann degradation, 722.
Ingold, *C. K.*, and **Rydon**, *H. N.*, validity of Holden and Lapworth's theory of the mechanism of abnormal Michael additions, 857.
Ingold, *C. K.* See also **Anantakrishnan**, *S. V.*, **Gleave**, *J. L.*, **Hsü**, *S. K.*, and **Hughes**, *E. D.*
Irving, *H.* See **Chattaway**, *F. D.*
Ives, *D. J. G.*, and **Rydon**, *H. N.*, isotopic exchange reactions of organic compounds. Part I. The intermolecular nature of three-carbon tautomerism, 1735.

J.

Jambuserwala, *G. B.* See **Rowe**, *F. M.*
James, *D. J.*, the function of sulphuric acid in nitration, 785.
James, *F. W.* See **King**, *A.*
James, *T. C.* See **Jones**, *J. I.*
Jarrett, *M. E. D.* See **Britton**, *H. T. S.*
Jeffery, *G. H.*, and **Vogel**, *A. I.*, dissociation constants of organic acids. Part XI. Thermodynamic primary dissociation constants of some normal dibasic acids, 21.
Jeffery, *G. H.* See also **German**, *W. L.*
Jenkins, *H. O.*, and **Sutton**, *L. E.*, electrical polarisation of concentrated solutions of nitrobenzene, with special reference to the validity of the Sugden relation, 609.
Jennings, *J. S.*, **Sharratt**, *E.*, and **Wardlaw**, *W.*, compounds of α-benzoinoxime with bivalent metals, 818.
Johnston, *R. G.*, and **Read**, *J.*, researches in the carvone series. Part III. Carvomenthols, *l-iso*carvomenthone, and *l-iso*carvomenthylamine, 1138.
Jolley, *L. J.* See **Emeléus**, *H. J.*
Jones, *B.*, halogenation of phenolic ethers and anilides. Part V. Alkyl and ω-substituted-alkyl ethers. Part VI. Benzyl and substituted-benzyl ethers, 1831, 1835.
apparent cases of liquid-crystal formation in *p*-alkoxybenzoic acids, 1874.
Jones, *B.* See also **Baddeley**, *G.*, and **Bennett**, *G. M.*
Jones, *P. T.* See **Burns**, *R.*
Jones, *E. G.*, and **Soper**, *F. G.*, nature of the ceric sulphates, 802.
Jones, *E. R.* See **Bradfield**, *E. R.*
Jones, *J. I.*, and **James**, *T. C.*, addition of halogens to unsaturated acids and esters. Part V. The bromination of *m*-methoxycinnamic acid and its ethyl ester, 1600.
Jones, *W. E.* See **Davies**, *W. H.*
Jones, *W. J.*, **Evans**, *D. P.*, **Gulwell**, *T.*, and **Griffiths**, *D. C.*, some physical properties of the alkyl compounds of mercury, tin, and lead, 39.
Juliusburger, *F.*, **Topley**, *B.*, and **Weiss**, *J.*, stability against interchange of the iodine atoms in diphenyliodonium iodide, 1295.
Juliusburger, *F.* See also **Hughes**, *E. D.*
Juneja, *H. R.*, **Narang**, *K. S.*, and **Rây**, *J. N.*, constitution of vasicine, 1277.

K.

Kearton, *C. F.* See **Thompson**, *H. W.*
Keats, *G. H.* See **Mills**, *W. H.*
Keggin, *J. F.* See **Illingsworth**, *J. W.*
Kenner, *J.*, and **Statham**, *F. S.*, constitution of apocinchene and syntheses of its methyl and ethyl ethers, 299.
Kenner, *J.* See also **Adamson**, *D. W.*, and **Baddeley**, *G.*
Kent, *A.*, complexes of polynitro-compounds. Part I. Compounds of polynitrohydrocarbons with 1-keto-1:2:3:4-tetrahydrocarbazole, 976.
Kenyon, *J.*, **Phillips**, *H.*, and **Pittman**, (*Miss*) *V.*, Walden inversion reactions of *d*-β-butyl, *d*-β-octyl, and *d*-benzylmethylcarbinyl *p*-toluenesulphonates, 1072.
Kenyon, *J.*, **Phillips**, *H.*, and **Shutt**, *G. R.*, Walden inversion reactions of the *p*-toluenesulphinic and the *p*-toluenesulphonic esters of ethyl *d*-β-hydroxy-β-phenylpropionate, 1663.
Kenyon, *J.* See also **Consden**, *R.*

Kermack, *W. O.*, **Muir**, *W.*, and **Wight**, *T. W.*, attempts to find new antimalarials. Part XIII. Synthesis of ω-substituted derivatives of 8-methylquinoline, 1143.
Kermack, *W. O.*, and **Wight**, *T. W.*, attempts to find new antimalarials. Part XIV. Derivatives of 8-methylquinoline, 1421.
Kermack, *W. O.* See also **Gillieson**, *A. H. C. P.*
King, *A.*, studies in chemisorption on charcoal. Part VI. The p_H of charcoal suspensions, 889.
King, *A.*, **James**, *F. W.*, **Lawson**, *C. G.*, and **Briscoe**, *H. V. A.*, selective adsorption of heavy water, 1545.
King, *F. E.*, dicyclic derivatives of simple aliphatic ketones, 982.
King, *F. E.*, and **Robinson**, *R.*, experiments on the synthesis of physostigmine (eserine). Part XI. The later phases of the synthetical investigations, 755.
King, *H.*, curare alkaloids. Part I. Tubocurarine, 1381.
King, *H.* See also **Dyke**, *W. J. C.*
King, *H. I.*, and **Robertson**, *A.*, experiments on the synthesis of rotenone and its derivatives. Part VI. Chromenochromones, 993.
King, *W. E.* See **Denham**, *H. G.*
Kingzett, *C. T.*, obituary notice of, 1899.
Kipping, *F. B.*, the properties of some optically active sulphonylthioethanes, 18.
the lactone of γ-hydroxyvinylacrylic acid, protoanemonin, 1145.
Kipping, *F. S.*, and **Blackburn**, *J. C.*, organic derivatives of silicon. Part XLIX. Reduction of the tetranitrotetraphenylsilicanes, 1085.
Kipping, *F. S.*, and **Cusa**, *N. W.*, organic derivatives of silicon. Part L. Nitration of phenyltriethyl-, diphenyldiethyl-, and triphenylethyl-silicane, 1088.
Kirkby, *W. A.*, correlation of flame movement and ionisation current during explosions, 160.
correlation of ionisation and radiation in carbon monoxide–oxygen explosions, 165.
Kon, *G. A. R.* See **Gamble**, *D. J. C.*
Kuriyan, *K. I.* See **Hughes**, *E. D.*

L.

Lamb, *S. A.* See **Thompson**, *H. W.*
Landquist, *J. K.* See **Drew**, *H. D. K.*
Langer, *C.*, obituary notice of, 1344.
Lautsch, *W.* See **Paneth**, *F. A.*
Lawrence, *C. A.* See **Barnett**, *E. de B.*, and **Cook**, *J. W.*
Lawson, *A.*, and **Balson**, *E. W.*, reaction between hydrogen peroxide and cerous hydroxide, 362.
Lawson, *C. G.* See **King**, *A.*
Leather, *J. W.*, obituary notice of, 1345.
Lebeau, *P.* See **Baxter**, *G. P.*
Leckie, *A. H.* See **Angus**, *W. R.*
Le Fèvre, (*Mrs.*) *C. G.*, and **Le Fèvre**, *R. J. W.*, dipole moments of 1:4-dinitro-, 1:3:5-trinitro-, and certain 2:4:6-trisubstituted-1:3:5-trinitrobenzenes, 957.
dipole moments and structures of some quinoline derivatives, and the orientation of Claus and Hoffmann's α-nitro*iso*quinoline, 1470.
dipole moments of *cyclo*hexa-1:4-dione, *cyclo*pentadienebenzoquinone, benzoquinone, carbon suboxide and carbonyl chloride, 1696.
relation between molecular orientation polarisation of substances in the liquid, dissolved, and gaseous states, 1747.
Le Fèvre, (*Mrs.*) *C. G.*, **Le Fèvre**, *R. J. W.*, and **Robertson**, (*Miss*) *K. W.*, dipole moments of *p*-cymene; 2- and 3-halogeno-*p*-cymenes, carvacrol, and thymol; *p*-ethyltoluene; *p-tert.*-butyltoluene, 1:3-dimethyl-5-*tert.*-butylbenzene, *tert.*-butylbenzene and its *p*-nitro-derivative, 480.
Le Fèvre, (*Mrs.*) *C. G.* See also **Angus**, *W. R.*
Le Fèvre, *R. J. W.*, a simple relation between molecular polarisation in solution and the dielectric constant of the solvent, 773.
Le Fèvre, *R. J. W.* See also **Angus**, *W. R.*, and **Le Fèvre**, (*Mrs.*) *C. G.*
Legard, *A. R.* See **Hinshelwood**, *C. N.*
Lemon, *J. T.* See **Lowry**, *T. N.*
Lesslie, (*Miss*) *M. S.*, and **Turner**, *E. E.*, the configuration of heterocyclic compounds. Part II. Some phenoxarsonium salts. Part III. The optical resolution of 10-ethylphenoxarsine-2-carboxylic acid, 1051, 1268.
Levin, (*Miss*) *E.* See **Rowe**, *F. M.*
Levy, *S. I.*, Brauner Memorial Lecture, 1876.
Lewi, (*Miss*) *P.* See **Achmatowicz**, *O.*
Lewis, *H. J.*, **Ramage**, *G. R.*, and **Robinson**, *R.*, experiments on the synthesis of substances related to the sterols. Part IV. Some derivatives of chrysene, 1412.
Lewis, *R. H.* See **Dippy**, *J. F. J.*
Lidwell, *O. M.*, and **Bell**, *R. P.*, reaction between potassium permanganate and oxalic acid, 1303.
Linnett, *J. W.* See **Thompson**, *H. W.*
Linstead, *R. P.* See **Barrett**, *J. W.*, **Boorman**, *E. J.*, and **Dey**, *A. N.*
Lishmund, *R. E.* See **Lowry**, *T. M.*
Livingston, *A.* See **Loudon**, *J. D.*
Loleit, *H.* See **Paneth**, *F. A.*
Lomax, *R.* See **Astbury**, *W. T.*
Lothian, (*Miss*) *O. M.* See **Baker**, *W.*
Loudon, *J. D.*, mercury derivatives of camphor. Part II., 535.
2:4-dinitrodiphenylsulphones, 537.
Loudon, *J. D.*, and **Livingston**, *A.*, exchange of sulphonyl groups in thiolsulphonic esters, 896.
Lowe, *A.* See **Davies**, *W. H.*
Lowry, *T. M.*, and **Baldwin**, *W. C. G.*, rotatory dispersion of organic compounds. Part XXVI. Acetoin, 704.
Lowry, *T. M.*, and **Lemon**, *J. T.*, properties of the oxides of nitrogen. Part I. The binary system N_2O_4–N_2O_3, 692.
Lowry, *T. M.*, and **Lishmund**, *R. E.*, rotatory dispersion of organic compounds. Part XXVII. Menthone and carvomenthone. Part XXVIII. The ultra-violet absorption of ketones, 709, 1313.
Lowry, *T. M.* See also **Baldwin**, *W. C. G.*
Lund, *H.*, pyridylnitropyrazole. Part II. Derivatives of 4-nitro-5-pyridylpyrazole, 418.

M.

Macbeth, *A. K.*, and **Price**, *J. R.*, action of titanous chloride on nitrophenylhydrazones: *p*-nitro- and 2:4-dinitro-phenylhydrazones, 151.
the absorption spectra of nitrophenylhydrazines, 1563.
Macbeth, *A. K.*, **Price**, *J. R.*, and **Winzor**, *F. L.*, colouring matters of *Drosera Whittakeri*. Part I. The absorption spectra and colour reactions of hydroxy-naphthaquinones, 325.
Macbeth, *A. K.*, and **Winzor**, *F. L.*, colouring matters of *Drosera Whittakeri*. Part II., 334.
McClelland, *E. W.* See **Barry**, *W. J.*

McCombie, *K.*, and **Purdie,** *D.*, $\beta\beta'\beta''$-trichlorotriethylamine, 1217.
Macdonald, *J. McL.* See **Clemo,** *G. R.*
Macdougall, *G.*, and **Davies,** *C. W.*, solubility of barium iodate in salt solutions, 1416.
McGeoch, (*Miss*) *S. N.*, and **Stevens,** *T. S.*, abnormal reaction of an α-bromo-ketone, 1032.
McIlwain, *H.* See **Clemo,** *G. R.*
McKenzie, *A.*, and **Stewart,** *P. A.*, optical activity in the indole group, 104.
McKenzie, *A.* See also **Christie,** *E. W.*
Mackney, *A. W.* See **Earl,** *J. C.*
McLean, *A.*, studies in solvent action. Part IX. Rotatory powers of the *l*-menthyl esters of *m*-nitro- and 3:5-dinitro-benzoic acids in relation to the solvent, concentration, temperature, and wave-length of light, 229.
McQuillen, *A.* See **Clemo,** *G. R.*
Mahal, *H. S.*, **Rai,** *H. S.*, and **Venkataraman,** *K.*, synthetical experiments in the chromone group. Part XVI. Chalkones and flavanones and their oxidation to flavones by means of selenium dioxide, 866.
Mahal, *H. S.* See also **Bhalla,** *D. C.*
Mair, *J. A.* See **Hardie,** *T.*
Malkin, *T.*, the odd-membered *n*-primary alcohols (the $\alpha \rightarrow \beta$ transition), 726.
Mann, *F. G.*, **Crowfoot,** (*Miss*) *D.*, **Gattiker,** *D. C.*, and **Wooster,** (*Mrs.*) *N.*, structure and configuration of certain diamminopalladium compounds, 1642.
Mann, *F. G.*, and **Purdie,** *D.*, constitution of complex metallic salts. Part III. Parachors of palladium and mercury in simple and complex compounds, 1549.
Marsh, *J. K.*, a volumetric determination of the atomic weight of terbium, 772.
Martin, *G. T. O.* See **Arndt,** *F.*
Masson, *I.*, **Race,** *E.*, and **Pounder,** *F. E.*, the iodoxy-group and its relations, 1669.
Masterman, *S.* See **Hughes,** *E. D.*
Maxted, *E. B.*, and **Moon,** *C. H.*, energetics of catalysis. Part IV. Influence of deactivation by heat treatment on the value of the activation energy. Part V. Temperature coefficient of hydrogenation processes, 393, 1190.
Mayneord, *W. V.* See **Cook,** *J. W.*
Mead, *T. H.* See **Gulland,** *J. M.*
Meisenheimer, *J.*, obituary notice of, 1355.
Melhuish, *R. R.* See **Hill,** *D. W.*
Menon, *B. K.*, a synthesis of 1-naphthol-2:4-dicarboxylic acid, 1061.
Menon, *B. K.* See also **Peacock,** *D. H.*
Mercer, *D.*, **Robertson,** *A.*, and **Cahn,** *R. S.*, picrotoxin. Part I. Constitution of picrotic acid and the *C*-skeleton of picrotoxinin and picrotin, 997.
Meyer, *R. J.* See **Baxter,** *G. P.*
Michaelis, *R.* See **Schönberg,** *A.*
Middleton, *A. W.*, and **Ward,** *A. M.*, composition and properties of precipitated nickel and cobalt sulphides. Part I., 1459.
Miller, *G. L.* See **Wren,** *H.*
Mills, *W. H.*, and **Keats,** *G. H.*, configurations of the Δ^2-tetrahydro- and the hexahydro-terephthalic acids, 1373.
Mills, *W. H.*, and **Quibell,** *T. H. H.*, configuration of the valencies of 4-covalent platinum: optical resolution of *meso*-stilbenediamino*iso*butylenediaminoplatinous salts, 839.
Mohrhenn, *H. G. G.* See **Ingold,** *C. K.*
Monk, *R. G.*, and **Ellingham,** *H. J. T.*, relative oxidation potentials of nitric acid solutions, 125.
Moon, *C. H.* See **Maxted,** *E. B.*
Morgan, *G. T.*, presidential address, 554.
Morgan, *G. T.*, and **Walton,** *E.*, new derivatives of *p*-arsanilic acid. Part VI. *p*-Arsonopimelanilic and *p*-arsonosuberanilic acids and related compounds, 290.
Morgan, *S.*, obituary notice of, 1346.
Morgan, *V. G.*, and **Watson,** *H. B.*, influence of nuclear substituents upon side-chain reactions. Part III. Base-catalysed prototropy of substituted acetophenones, 1173.
Morgan, *V. G.* See also **Evans,** *D. P.*
Morgan, *W. H.* See **Hinkel,** *L. E.*
Morgan, *W. McG.* See **Clemo,** *G. R.*
Morris, *C. J. O. R.* See **Gulland,** *J. M.*
Morton, *R. A.* See **Ault,** *R. G.*
Motwani, *D. C.*, and **Wheeler,** *T. S.*, β-hydroxyethyl ethers of substituted phenols and related substances, 1098.
Moulds, *L. de V.* See **Astin,** *S.*
Muir, *W.* See **Kermack,** *W. O.*
Munro, *J.*, and **Percival,** *E. G. V.*, monomethyl hexoses. Part I. Constitution of the supposed 4-methyl glucose, 873.

N.

Narang, *K. S.* See **Juneja,** *H. R.*
Nathan, *W. S.* See **Baker,** *J. W.*
Naylor, *C. A.*, and **Wheeler,** *R. V.*, ignition of gases. Part IX. Ignition by a heated surface; mixtures of methane and air at reduced pressures, 1426.
Nieuwland, *J. A.* See **Young,** *C. A.*
Norrish, *R. G. W.* See **Bamford,** *C. H.*, **Bloch,** *B. M.*, and **Saltmarsh,** (*Miss*) *O. D.*
Nunn, *A. W.*, obituary notice of, 861.

O.

Odén, *S. L. A.*, obituary notice of, 862.
Ogston, *A. G.*, constitution of the purine nucleosides. Part III. Potentiometric determination of the dissociation constants of methylated xanthines, 1376.
Oldham, *J. W. H.*, and **Robertson,** *G. J.*, transformation of glucose into galactose and gulose by simple optical inversion, 685.
O'Mahony, *D. J.*, obituary notice of, 408.
Orr, *W. J. C.*, and **Butler,** *J. A. V.*, rate of diffusion of deuterium hydroxide in water, 1273.
Overend, *F. L.*, obituary notice of, 1902.

P.

Paddock, *H. J. H.* See **Cullinane,** *N. M.*
Paice, *E. S.* See **Farmer,** *E. H.*
Paneth, *F. A.*, **Hofeditz,** *W.*, and **Wunsch,** A., free organic radicals in the gaseous state. Part V. Reaction products of free methyl in hydrogen and helium, 372.
Paneth, *F. A.*, and **Lautsch,** *W.*, free organic radicals in the gaseous state. Part VI. Attempts to prepare various free radicals: existence of free benzyl, 380.
Paneth, *F. A.*, and **Loleit,** *H.*, free organic radicals in the gaseous state. Part IV. Synthesis of antimony cacodyl and related substances by the use of free methyl and free ethyl, 366.
Parken, *E. R.* See **Hunter,** *R. F.*
Parkes, *G. D.*, and **Burney,** *E. d'A.*, derivatives of 6-bromo- and 4:6-dibromo-*m*-toluidine, 1619.
Parkes, *G. D.* See also **Chattaway,** *F. D.*
Parry, *G. A.* See **Bury,** *C. R.*
Partington, *J. R.* See **Arndt,** *F.*, **Bahl,** *R. K.*, and **Cowley,** *E. G.*

Partridge, *H. W.* See **Rowe,** *F. M.*
Pask, *J. D.* See **Rowe,** *F. M.*
Patterson, *T. S.*, and **Holmes,** *G. M.*, metacetaldehyde: its preparation and its influence on the rotation of ethyl tartrate, 904.
Paul, *L. G.*, obituary notice of, 409.
Peacock, *D. H.*, benzylation of amines. Part IV. rate of reaction of benzyl bromide with nitrobenzylaniline and some derivatives, 16.
influence of substituents on the energy of activation, 1326.
Peacock, *D. H.*, and **Chowdhury,** *J. C.*, a new alkaloid from the bark of *Holarrhena antidysenterica*, 734.
Peacock, *D. H.*, and **Menon,** *B. K.*, inversion of α-substituted hydroxyhydrindeneacetic acids, 15.
Peacock, *D. H.* See also **Chowdhury,** *J. C.*, and **Singh,** *A.*
Pearson, *T. G.*, and **Purcell,** *R. H.*, free radicals and atoms in primary photochemical processes; the photo-dissociation of aliphatic aldehydes and ketones, 1151.
Pearson, *T. G.* See also **Aynsley,** *E. E.*
Penfold, *A. R.* See **Bradfield,** *A. E.*
Percival, (*Mrs.*) *E. E.*, and **Percival,** *E. G. V.*, methylation of glucosephenylosazone and its formulation as a derivative of fructopyranose, 1398.
Percival, *E. G. V.*, addition compounds of the carbohydrates. Part II. Potassium hydroxide-sucrose, 648.
Percival, *E. G. V.* See also **Munro,** *J.*, and **Percival,** (*Mrs.*) *E. E.*
Peters, *A. T.* See **Rowe,** *F. M.*
Petrow, *V. A.* See **Dorée,** *C.*
Phillips, *H.* See **Kenyon,** *J.*
Pinkard, *F. W.* See **Cox,** *E. G.*
Pittman, (*Miss*) *V.* See **Kenyon,** *J.*
Plant, (*Miss*) *M. M. T.* See **Haworth,** *W. N.*
Plant, *S. G. P.*, **Rogers,** (*Miss*) *K. M.*, and **Williams,** *S. B. C.*, the Friedel and Crafts reactions in the carbazole series, 741.
Plant, *S. G. P.*, and **Tomlinson,** (*Miss*) *M. L.*, structure of glutaryl chloride, 856.
the ω-3-amino-4-methoxy- and -ethoxy-benzoyl derivatives of propionic, butyric, and valeric acid, 1092.
Pollard, *F. H.* See **Garner,** *W. E.*
Pounder, *F. E.* See **Masson,** *I.*
Powell, *H. M.*, and **Wells,** *A. F.*, structure of cæsium cobalt chloride (Cs_3CoCl_5), 359.
complex-anion formation by tervalent elements: structure of cæsium thallic enneachloride, 1008.
Price, *J. R.* See **Macbeth,** *A. K.*
Purcell, *R. H.* See **Pearson,** *T. G.*
Purdie, *D.* See **McCombie,** *H.*, and **Mann,** *F. G.*
Pursell, *W.* See **Rule,** *H. G.*
Pyman, *F. L.* See **Garforth,** *B.*

Q.

Quibell, *T. H. H.* See **Mills,** *W. H.*

R.

Race, *E.* See **Masson,** *I.*
Rai, *H. S.* See **Mahal,** *H. S.*
Ramage, *G. R.*, and **Simonsen,** *J. L.*, the caryophyllenes. Parts II. and III., 532, 1581.
Ramage, *G. R.* See also **Gratton,** *G.*, and **Lewis,** *H. J.*
Ramchandani, *C. N.* See **Butler,** *J. A. V.*
Raper, *R.* See **Clemo,** *G. R.*
Rapson, *W. S.*, and **Robinson,** *R.*, experiments on the synthesis of substances related to the sterols. Part II. A new general method for the synthesis of substituted *cyclo*hexenones. Part VII., 1285, 1533.
Rây, *J. N.*, **Silooja,** *S. S.*, and **Vaid,** *V. R.*, experiments on the synthesis of bergapten and its derivatives. Part I. Furocoumarins, 813.
Rây, *J. N.* See also **Juneja,** *H. R.*
Ray, *R. C.*, and **Sinha,** *P. C.*, the hydrolysis of magnesium boride, 1694.
Read, *J.* See **Johnston,** *R. G.*, and **Wilson,** *N. A. B.*
Reade, *T. H.* See **Donald,** *C.*
Reilly, *J.*, and **Drumm,** *P. J.*, mechanism of diazotisation, 871.
Reuter, *F.* See **Clutterbuck,** *P. W.*
Reynolds, *F. M.* See **Bennett,** *G. M.*
Reynolds, (*Miss*) *T. M.*, and **Robinson,** *R.*, strychnine and brucine. Part XXXIII. Methoxymethyl-*chano*dihydrostrychnanic acid and its resistance to facile dehydrogenation, 935.
Richardson, *T.* See **Haworth,** *R. D.*
Rideal, *E. K.* See **Tucholski,** *T.*
Ridsdale, *C. H.*, obituary notice of, 409.
Rigg, *J. G.* See **Hilditch,** *T. P.*
Riley, *H. L.* See **Astin,** *S.*, and **Balfour,** *A. E.*
Ritchie, *A.* See **Christie,** *E. W.*
Ritchie, *P. D.*, studies in pyrolysis. Part III. Pyrolysis of carbonic and sulphurous esters, 1054.
Ritchie, *P. D.* See also **Burns,** *R.*
Ritchings, *W.*, obituary notice of, 1903.
Roberts, *K. C.*, action of nitric acid upon *p*-hydroxyphenyltrimethylammonium iodide, 116.
Roberts, *K. C.*, and **Clark,** (*Miss*) *H. B.*, a rearrangement of *o*-aminodiphenyl ethers. Part IV. *N*-Alphylphenoxazines, 1312.
Roberts, *K. C.*, and **De Worms,** *C. G. M.*, a rearrangement of *o*-aminodiphenyl ethers. Part III. 2-Acylamidodiphenyl ethers, 1309.
Roberts, *K. C.*, **De Worms,** *C. G. M.*, and **Clark,** (*Miss*) *H. B.*, a rearrangement of *o*-aminodiphenyl ethers. Part II., 196.
Robertson, *A.*, and **Rusby,** *G. L.*, experiments on the synthesis of rotenone and its derivatives. Part VII. Tetrahydrotubaic acid, 1371.
Robertson, *A.* See also **Curd,** *F. H.*, **Heyes,** *R. G.*, **King,** *H. I.*, and **Mercer,** *D.*
Robertson, *G. J.*, and **Griffith,** *C. F.*, conversion of derivatives of glucose into derivatives of altrose by simple optical inversions, 1193.
Robertson, *G. J.* See also **Oldham,** *J. W. H.*
Robertson, *J. M.*, an *X*-ray study of the structure of the phthalocyanines. Part I. The metal-free, nickel, copper, and platinum compounds, 615.
Robertson, (*Miss*) *K. W.* See **Le Fèvre,** (*Mrs.*) *C. G.*
Robinson, (*Mrs.*) *A. M.* See **Cook,** *J. W.*
Robinson, (*Mrs.*) *G. M.*, and **Robinson,** *R.*, leucoanthocyanins and leuco-anthocyanidins. Part I. The isolation of peltogynol and its molecular structure, 744.
Robinson, *P. L.* See **Aynsley,** *E. E.*, and **Cook,** *R. P.*
Robinson, *R.*, and **Schlittler,** *E.*, experiments on the synthesis of substances related to the sterols. Part III. A new synthesis of certain ketohydrophenanthrene derivatives, 1288.
Robinson, *R.*, and **Tomlinson,** (*Miss*) *M. L.*, thiopyrimidazine derivatives, 467.
pyrimidines. Part II., 1283.
Robinson, *R.*, and **Walker,** *James*, a new synthesis of chromylium salts. Part II., 941.
experiments on the synthesis of substances related to the sterols. Part VI., 1530.

Robinson, *R.*, and **Young,** *P. C.*, experiments on the synthesis of substances related to the sterols. Part V. Condensation of phenylsuccinic anhydride with veratrole under the influence of aluminium chloride, 1414.

Robinson, *R.* See also **Achmatowicz,** *O.*, **Appel,** *H.*, **Dovey,** *W. C.*, **King,** *F. E.*, **Lewis,** *H. J.*, **Rapson,** *W. S.*, **Reynolds,** (*Miss*) *T. M.*, and **Robinson,** (*Mrs.*) *G. M.*

Roe, (*Miss*) *E.* See **Cook,** *J. W.*, and **Haslewood,** *G. A. D.*

Roger, *R.*, resolution of *r*-mandelic acid with (−)ephedrine, 1544.

Rogers, (*Miss*) *K. M.* See **Plant,** *S. G. P.*

Rogers, *M. A. T.* See **Ingold,** *C. K.*

Rose, *J. D.* See **Arndt,** *F.*

Rowe, *A. W.*, obituary notice of, 863.

Rowe, *F. M.*, **Dovey,** *W. C.*, **Garforth,** *B.*, **Levin,** (*Miss*) *E.*, **Pask,** *J. D.*, and **Peters,** *A. T.*, reaction of certain diazosulphonates derived from β-naphthol-1-sulphonic acid. Part XIII. Fission of the naphthalene nucleus and subsequent closure in two directions, 1796.

Rowe, *F. M.*, **Gillan,** *J. C.*, and **Peters,** *A. T.*, reaction of certain diazosulphonates derived from β-naphthol-1-sulphonic acid. Part XIV. Preparation of 1:4-diketo-3-(nitroaryl)tetrahydrophthalazines or 4-keto-1-hydroxy-3-(nitroaryl)-3:4-dihydrophthalazines and related compounds, 1808.

Rowe, *F. M.*, **Jambuserwala,** *G. B.*, and **Partridge,** *H. W.*, a reaction of certain diazosulphonates derived from β-naphthol-1-sulphonic acid. Part XII. Preparation of phthalazine, phthalazone, and phthalimidine derivatives from 2-bromo-4-nitroaniline, 1134.

Rule, *H. G.*, and **Cunningham,** *J. P.*, studies in solvent action. Part X. Rotatory powers of dimethylene tartrate, methylenetartaric acid and its dimethyl ester, in the presence of added solvents and salts, 1038.

Rule, *H. G.*, and **Dunbar,** *A.*, studies in solvent action. Part XI. Influence of solvent, concentration, and temperature upon the rotatory powers of *l*-menthyl *o*-substituted benzoic esters, 1043.

Rule, *H. G.*, **Pursell,** *W.*, and **Barnett,** *A. J. G.*, 1:9-benzanthrone-8-carboxylic acid and dibenzanthronedicarboxylic acid from 8-bromo-1-naphthoic acid, 571.

Rule, *H. G.*, and **Turner,** *H. M.*, reactivity of *peri*-substituted naphthalenes. Part III. Further synthetic reactions of 8-halogeno-1-naphthoic acids, 317.

optical resolution of phenyl 8-carboxy-1-naphthyl sulphoxide; the prediction of restricted rotation in *peri*-substituted naphthalenes, 319.

Rule, *H. G.* See also **Bigelow,** *L. A.*

Rusby, *G. L.* See **Robertson,** *A.*

Russell, *A. S.*, Madame Curie Memorial Lecture, 654.

Russell, (*Sir*) *E. J.*, chemical problems in crop production, 48.

Rydon, *H. N.*, studies on the Michael reaction. Part I. Condensation of ethyl benzylmalonate with ethyl fumarate, 420.

Rydon, *H. N.* See also **Ingold,** *C. K.*, and **Ives,** *D. J. G.*

S.

Saltmarsh, (*Miss*) *O. D.*, and **Norrish,** *R. G. W.*, primary photochemical reactions. Part VI. The photochemical decomposition of certain cyclic ketones, 455.

Samuels, *H.* See **Herbert,** *R. W.*

Sangewald, *R.* See **Weissberger,** *A.*

Saniter, *E. H.*, obituary notice of, 410.

Saunders, *B.* See **Gamble,** *D. J. C.*

Sayce, *L. A.*, kinetics of the reaction between oxygen and sulphur. Part I. Aspects of the reaction at 240—280°, 1767.

Schlittler, *E.* See **Robinson,** *R.*

Schönberg, *A.*, and **Michaelis,** *R.*, studies in pyrolysis; elimination of two hydroxyl groups from a glycol, 1403.

Schönberg, *A.*, and **Urban,** *W.*, organic compounds of sulphur. Part XXV. The interaction between organic azides and aromatic thio-ketones and a new method of converting the azido-group into the amino-group, 530.

Seshadri, *T. R.* See **Barger,** *G.*

Shah, *R. C.*, and **Ichaporia,** *M. B.*, imidochlorides. Part II. Condensation of benzanilide imidochloride with substituted dialkylanilines in presence of anhydrous aluminium chloride; synthesis of dialkylaminobenzophenones, 894.

Sharp, *T. M.* See **Henry,** *T. A.*

Sharratt, *E.* See **Jennings,** *J. S.*

Sheldrick, *G.* See **Haworth,** *R. D.*

Shoppee, *C. W.* See **Baker,** *J. W.*, and **Burton,** *H.*

Short, *W. F.* See **Hill,** *P.*

Shutt, *G. R.* See **Kenyon,** *J.*

Silooja, *S. S.* See **Ray,** *J. N.*

Simonsen, *J. L.*, recent progress in the chemistry of the terpenes, 781.

Simonsen, *J. L.* See also **Bradfield,** *A. E.*, **Francis,** *E. M.*, **Gratton,** *G.*, and **Ramage,** *G. R.*

Singh, *A.*, and **Peacock,** *D. H.*, reactivity of halogen compounds. Part III. Velocities of reaction, energies of activation, and probability factors for the reaction between 2:4-dinitrobromobenzene and some aromatic primary amines. Part IV. Effect of the addition of inactive substances on the rate of reaction, energy of activation, and probability factor, 1410, 1411.

Sinha, *P. C.* See **Ray,** *R. C.*

Sixsmith, *G.* See **Hammick,** *D. L.*

Slatter, *G. W.*, obituary notice of, 1903.

Smiles, *S.* See **Evans,** *W. J.*, **Galbraith,** *F.*, and **Wight,** *C. F.*

Smith, *C. C.*, obituary notice of, 1904.

Smith, *E. W.* See **Hodgson,** *H. H.*

Smith, (*Miss*) *I. A.*, (−)phenylmethoxyacetonitrile, 194.

Smith, *J. C.* See **Harris,** *P. L.*, and **Harris,** *R. M.*

Smith, *M. L.* See **Topley,** *B.*

Smith, *S.*, digitalis glucosides. Part IV. Existence of two anhydrodigitoxigenins. Part V. Constitution of digoxigenin, 1050, 1305.

Solomon, *W.* See **Henry,** *T. A.*

Soper, *F. G.*, kinetics of slow reactions, and their entropy changes, 1393.

Soper, *F. G.* See also **Jones,** *E. G.*

Southon, *W. R.* See **Garner,** *W. E.*

Speakman, *J. C.*, surface tensions and partial vapour pressures of aqueous aniline solutions, 776.

Spence, *R.*, and **Wild,** *W.*, preparation of liquid monomeric formaldehyde, 338.

vapour-pressure curve of formaldehyde, and some related data, 506.

Spencer, *J. F.* See **Hollens,** (*Miss*) *W. R. A.*

Spragg, *W. T.* See **Gillieson,** *A. H. C. P.*

Spring, *F. S.*, and **Vickerstaff,** *T.*, behaviour of keten in the Friedel–Crafts reaction, 1873.

Spring, *F. S.* See also **Coffey,** *D. H.*, and **Heilbron,** *I. M.*

Statham, *F. S.* See **Kenner,** *J.*

Stevens, *T. S.*, synthetical experiments on protopine and allied alkaloids. Part II. New synthesis of the berberine ring-system, and of a ring-homologue of the aporphine alkaloids, 663.

derivatives of *o*-piperonal, 725.

Stevens, *T. S.* See also **McGeoch**, (*Miss*) *S. N.*
Stewart, *K.* See **Emeléus**, *H. J.*
Stewart, *P. A.* See **Heilbron**, *I. M.*, and **McKenzie**, *A.*
Strasser, *E.* See **Weissberger**, *A.*
Stubbs, *A. E.* See **Dakin**, *H. P.*, and **Fairbrother**, *F.*
Sugden, *S.* See **Cavell**, *H. J.*, and **Groves**, *L. G.*
Sunderland, *E.* See **Farmer**, *E. H.*
Sutton, *L. E.* See **Jenkins**, *H. O.*
Swaminathan, *M.* See **Chakravarti**, *S. N.*

T.

Taylor, *F. S.*, the ferrohalides of pyridine and quinoline, 115.
Taylor, *T. W. J.*, the configurations of the disulphoxides of thianthren, 625.
Taylor, *T. W. J.*, and **Coughtrey**, *W. C. J.*, charcoal as a catalyst of stereoisomeric change in disulphoxides, 974.
Taylor, *W.*, kinetics of the interactions of sodium hydroxide with the bromoethanes in ethyl-alcoholic solution; mechanism of olefin formation in such systems, 1514.
Teller, *E.*, and **Topley**, *B.*, equilibrium and the heat of the reaction $C_2H_4 + H_2 = C_2H_6$, 876.
vibration frequencies of ethylene and ethane, 885.
Thompson, *H. W.*, and **Frewing**, *J. J.*, kinetics of the thermal decomposition of acraldehyde, 1443.
Thompson, *H. W.*, **Kearton**, *C. F.*, and **Lamb**, *S. A.*, kinetics of the reaction between carbonyl sulphide and water, 1033.
Thompson, *H. W.*, and **Linnett**, *J. W.*, spectrum, fluorescence, and photochemical decomposition of acraldehyde, 1452.
Thomson, *D. W.* See **Butler**, *J. A. V.*
Thomson, *J. K.*, and **Wilson**, *F. J.*, arylamides of β-arylaminocrotonic acids. Part II., 111.
Tomlinson, (*Miss*) *M. L.*, preparation of 4-methylthiazole-5-carboxylic acid, 1030.
Tomlinson, (*Miss*) *M. L.* See also **Plant**, *S. G. P.*, and **Robinson**, *R.*
Topley, *B.*, and **Smith**, *M. L.*, kinetics of salt-hydrate dissociations: $MnC_2O_4,2H_2O = MnC_2O_4 + 2H_2O$, 321.
Topley, *B.* See also **Hughes**, *E. D.*, **Juliusburger**, *F.*, and **Teller**, *E.*
Tress, *H. J.* See **Drew**, *H. D. K.*
Tucholski, *T.*, and **Rideal**, *E. K.*, reaction of hydrogen and deuterium with ethylene at a nickel surface, 1701.
Turner, *E. E.* See **Lesslie**, (*Miss*) *M. S.*
Turner, *H. M.* See **Rule**, *H. G.*

U.

Ubbelohde, *A. R. J. P.*, oxidation mechanisms in aqueous solution, 1605.
Urban, *W.* See **Schönberg**, *A.*

V.

Vaid, *V. R.* See **Rây**, *J. N.*
Veal, *F. J.* See **Garner**, *W. E.*
Venkataraman, *K.* See **Bhalla**, *D. C.*, and **Mahal**, *H. S.*
Vickerstaff, *T.* See **Spring**, *F. S.*
Vogel, *A. I.* See **German**, *W. L.*, and **Jeffery**, *G. H.*
Vogt, *R. R.* See **Young**, *C. A.*

W.

Wagstaff, (*Miss*) *A. I.* See **Cox**, *E. G.*
Waine, *A. C.* See **Haworth**, *W. N.*
Walker, *A. J.*, obituary notice of, 1904.
Walker, *James*, a synthesis of *dl*-piperitone (*dl*-Δ^1-*p*-menthen-3-one), 1585.
Walker, *James*. See also **Baker**, *W.*, and **Robinson**, *R.*
Walker, (*Sir*) *James*, obituary notice of, 1347.
Walker, *John*. See **Hodgson**, *H. H.*
Walker, *O. J.*, and **Wild**, *G. L. E.*, decomposition of acetyl peroxide, 207.
Walls, *L. P.*, researches in the phenanthridine series. Part IV. Synthesis of plasmoquin-like derivatives, 1405.
Walters, *G. S.* See **Hartshorne**, *N. H.*
Walters, *W. P.* See **Davies**, *W. C.*
Walton, *E.* See **Morgan**, *G. T.*
Ward, *A. M.* See **Middleton**, *A. W.*
Wardlaw, *W.* See **Cox**, *E. G.*, and **Jennings**, *J. S.*
Wassermann, *A.*, the specificity of iron as a catalyst for the reaction between hydrogen peroxide and pyrogallol, 826.
the mechanism of additions to double bonds. Part I. Thermochemistry and kinetics of a diene synthesis. Part II. The steric course of two diene syntheses, 828, 1511.
Wassermann, *A.* See also **Angus**, *W. R.*
Waters, *W. A.*, 3-nitro-4-aminodiphenylmethane and its derivatives, 1875.
Watson, *H. B.* See **Dippy**, *J. F. J.*, **Evans**, *D. P.*, and **Morgan**, *V. G.*
Watt, *H. E.* See **Barger**, *G.*
Webster, *K. C.* See **Cox**, *E. G.*
Weekes, *E. V.* See **Barnett**, *E. de B.*
Weiss, *J.* See **Hughes**, *E. D.*, and **Juliusburger**, *F.*
Weissberger, *A.*, autoxidation processes. Part VIII. Steric hindrance in oxidation and racemisation of α-ketols, 223.
structure of tolan, 855.
Weissbeiger, *A.*, and **Bach**, *H.*, autoxidation processes. Part IX. The electrolytic dissociation of α-ketols, 226.
Weissberger, *A.*, **Bach**, *H.*, and **Strasser**, *E.*, 2-chloro-3:5-dinitro-4-chloromethyl- and 2:4:6-tribromo-3-bromomethyl-benzoic acids and attempts to resolve them, 68.
Weissberger, *A.*, and **Sängewald**, *R.*, dipole moment and structure of organic compounds. Part XIV. Direction of the electric moment of the $N\overset{\cdot\cdot}{}C$ Group, 855.
Weizmann, *C.*, **Bergmann**, *E.*, and **Bergmann**, *F.*, Grignard reactions with phthalic anhydrides, 1367.
Weizmann, *C.*, **Blum-Bergmann**, (*Mrs.*) *O.*, and **Bergmann**, *F.*, reaction of Grignard reagents with some succinic anhydrides, 1370.
Weizmann, *M.*, and **Haskelberg**, *L.*, acetylated sugars with a free α-position, and synthetic experiments with 2:3:4:6-tetra-acetyl glucose and similar compounds, 1022.
Wells, *A. F.* See **Powell**, *H. M.*
Wheat, *W. N.* See **Friend**, *J. N.*
Wheeler, *R. V.* See **Naylor**, *C. A.*
Wheeler, *T. S.* See **Motwani**, *D. C.*
Whytlaw-Gray, *R.*, the process of coagulation in smokes, 268.
Wight, *C. F.*, and **Smiles**, *S.*, a rearrangement of *o*-benzamido-sulphides, 340.
Wight, *T. W.* See **Kermack**, *W. O.*
Wild, *G. L. E.* See **Walker**, *O. J.*
Wild, *W.* See **Spence**, *R.*
Wilkinson, *J. A.*, obituary notice of, 1354.
Williams, *F. R.* See **Dippy**, *J. F. J.*
Williams, *R. B.* See **Hammick**, *D. L.*

Williams, *S. B. C.* See **Plant,** *S. G. P.*
Williams, *W. G.* See **Britton,** *H. T. S.*
Williams, *W. O. M.* See **Hartshorne,** *N. H.*
Wilmut, *H. F.* See **Hammick,** *D. L.*
Wilson, *C. L.*, preparation of organic compounds containing deuterium; dideuteromalonic deuteracid and trideuteracetic deuteracid, 492.
Wilson, *C. L.* See also **Hsü,** *S. K.*
Wilson, *F. J.* See **Thomson,** *J. K.*
Wilson, *N. A. B.*, and **Read,** *J.*, optically active diphenylhydroxyethylamines and *iso*hydrobenzoins. Part VI. The di-*o*-methoxyphenylhydroxyethylamines and related substances. Part VII. The 1:2-*cyclo*hexanediols and related compounds, 1120, 1269.
Winkler, *C. A.*, and **Hinshelwood,** *C. N.*, factors determining the velocity of reactions in solution; formation of quaternary ammonium salts in benzene solution, 1147.
Winzor, *F. L.*, colouring matters of *Drosera Whittakeri*. Part III. Synthesis of hydroxydroserone, 336.
Winzor, *F. L.* See also **Macbeth,** *A. K.*
Witherington, *P.* See **Chattaway,** *F. D.*
Wolfenden, *J. H.* See **Bell,** *R. P.*
Wolfrom, *M. L.* See **Baldwin,** *W. C. G.*
Wood, *C. E.* See **Harris,** *T. L.*, and **Herbert,** *R. W.*
Woolgar, (*Mrs.*) *M. D.* See **Haworth,** *W. N.*
Wooster, (*Mrs.*) *N.* See **Mann,** *F. G.*
Wren, *H.*, and **Miller,** *G. L.*, studies in the phenylsuccinic acid series. Part XI. Interaction of the optically active and inactive diphenylsuccinic anhydrides with butyl alcohol and aniline, 157.
Wright, *H. R.* See **Coffey,** *D. H.*
Wunsch, *A.* See **Paneth,** *F. A.*
Wynne-Jones, *W. F. K.*, note on "the conductivity of methoxides and ethoxides," 540.

Y.

Yabuta, *T.* See **Barger,** *G.*
Young, *C. A.*, **Vogt,** *R. R.*, and **Nieuwland,** *J. A.*, oxygen addition compounds of acetylenes, 115.
Young, *F. S.*, obituary notice of, 1907.
Young, *P. C.* See **Robinson,** *R.*
Yuill, *J. L.* See **Bennett,** *G. M.*

INDEX OF SUBJECTS, 1935.

A.

β-1-Acenaphthylethyl alcohol, and its derivatives, 669.
2-(β-1′-Acenaphthylethyl)*cyclo*hexanone-2-carboxylic acid, ethyl ester, 669.
α-(β′-1-Acenaphthylethyl)pimelic acid, 669.
Acetaldehyde, photolysis of, 1155.
Acetanilide, 3:4:5:6-*tetra*bromo-, and 2:3:4:5-*tetra*chloro-, 1006.
Acetanilides, nitroso-, *p*-substituted, rate of decomposition of, in benzene, 689.
Acetic acid, esterification of, 1590.
potassium salt, densities of aqueous solutions of, 626.
(−)β-butyl ester, 1079.
1-cyano*cyclo*hexyl ester, and its pyrolysis, 406.
Acetic acid, *tri*chloro-, and its hydrate, cryoscopy of, in benzene and in dioxan, 1432.
esterification of, 1590.
nitro-, ethyl ester, and its nitronic derivative, 6.
Acetoacetic acid, ethyl ester, action of, on aromatic diammines, 1568.
Acetoacetic acids, ethyl esters, migration of allyl groups in, 1363.
Acetoacet-*p*-phenetidide, 113.
Aceto-6-bromo-β-piperonylethylamide, 667.
(+)Acetomethylethylamide, 1080.
Aceto-1-naphthalide, 2-bromo-4-nitro-, 1597.
4-bromo- and 4-chloro-2-nitro-, 2-iodo-4-nitro-, and 4-nitro-, 1850.
Aceto-2-naphthalide, 3-bromo-, 3-bromo-1-nitro-, and 3-bromo-1:6-*di*nitro-, 1595.
Acetone, photolysis of, 1154.
molecular compounds of, with halogenomethanes, 1720.
Acetonedicarboxylic acid, ethyl ester, oxidation of, by selenium dioxide, 901.
Acetone-glucose, halogenoacetyl derivatives of, 1023.
Acetone-α-methylguloside, 688.
5-Aceto*di*nitroanilido-2-hydroxydiphenylamine, 2′:4′-*di*nitro-, 198.
2-Aceto-*o*-nitroanilido-1-naphthyl methyl sulphide, 187.
2-Aceto-*o*-nitroanilidophenyl mercaptan, 187.
2-Aceto-*o*-nitroanilidophenyl methyl sulphide, 5-nitro-, 188.
2-Aceto-*op*-*di*nitroanilidophenyl methyl sulphide, 187.
2-Aceto-*o*-nitroanilidophenylmethylsulphone, and 5-nitro-, 186.
7-Acetonyloxycoumarin, 815.
7-Acetonyloxycoumarin, 8-hydroxy-, 816.
7-Acetonyloxy-4-methylcoumarin, 815.
Acetophenone tolylhydrazones, 1210.
Acetophenone, *m*-hydroxy-, semicarbazone, 302.
Acetophenones, nuclear-substituted, velocities of acid-catalysed prototropy of, 1167.
substituted, base-catalysed prototropy of, 1173.
Acetophenones, *o*-hydroxy-, stabilisation of Kekulé forms in, 628.
α-Acetoxy*iso*butyric acid, esters, 715.
pyrolysis of derivatives of, 714.
α-Acetoxypropionic acid, pyrolysis of derivatives of, 400.
α- and β-Acetoxypropionitriles, and their pyrolysis, 405.
Acetyl *per*oxide, decomposition of, 207.
Acetylacetone, copper salt, 733.
Acetylacetone-α-methylgalactoside, 689.
Acetylacetone-α-methylguloside, 688.
***N*-Acetyl-α-acetoxy*iso*butyramide,** 716.
8-Acetylcoumarin, 7-hydroxy-, and its oxime, 815.
6-Acetyl 2:3-dibenzoyl 4-*p*-toluenesulphonyl α-methylglucoside, 6-*di*chloro-, 1182.
γ-Acetyl-ββ-dimethylbutyric acid, 1065.
Acetylene, oxygen addition compounds of, 115.
Acetylenic compounds, addition of hydrogen bromide to, 1572.
4-Acetyl-4′-ethyldiphenylamine, 2-nitro-, 743.
Acetylmethylcarbinol, rotatory dispersion of, 704.
1-Acetyl*cyclo*pentene, 1287.
5-Acetyl-1-phenyl-4′-ethylbenzotriazole, 743.
***s*-Acetylphenylselenourea,** 1764.
Acetylretronecanol, and its derivatives, 14.
***N*-Acetylthiodiphenylamine,** 3-nitro-, 1264.
2-Acetyl-1-thionaphthen, 3-hydroxy-, *p*-bromophenylhydrazone, 473.
6-Acetyl 2:3:4-tribenzoyl α-methylglucoside, 6-*di*chloro-, 1181.
2-Acetyl-6-trityl-3:4-anhydro-α-methylgalactoside, 688.
Acids, *di*basic, electrometric titration curves of, 949.
carboxylic, esterification of, 587.
esters, hydrolysis of, 1482.
*mono*carboxylic, constitution and dissociation constants of, 343, 346.
cyclic unsaturated, additive reactions and tautomerism of, 258.
higher fatty, esterification of, with glycerol and with ethylene glycol, 1774.
olefinic, 258.
organic, dissociation constants of, 21, 912, 1624.
unsaturated, and their esters, addition of halogens to, 1600.
weak, complex formation involving, 100, 168, 1728.
Acidity and tautomerism, 1.
Acraldehyde, spectrum, fluorescence, and photochemical decomposition of, 1452.
kinetics of thermal decomposition of, 1443.
Acrylic acid, benzyl and *n*-butyl esters, 404.
Activation, influence of substituents on energy of, 1326.
***o*-Acyloxyacetophenones,** action of sodamide on, 868.
Address, presidential, 554.
Adipic acid, dissociation constant of, 28.
Adsorption on charcoal, 889.
Affinity, residual, and absorption spectra, 965.
Alcohols, structure of, and reactivity with hydrobromic acid, 131.
aliphatic, energy of hydration of, 280.
primary, α—β change in, 726.
Aldehydes, aliphatic, photodissociation of, 1151.
aromatic, equilibrium of, with amino-acids, 210.
action of, on benzene and toluene, in presence of aluminium chloride, 72.
substituted, pyridine condensation with, 816.
unsaturated, action of halogens on arylhydrazones of, 90.
Aldehydes, halogeno-, condensation of, with nitromethane, 1178.

6-Aldehydo-2:4-*di*hydroxybenzoic acid *di*nitrophenylhydrazone hydrate, 1469.
3-Aldehydo-4-keto-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, ethyl ester, 642.
2-Aldehydo-4- and **-6-methoxyphenoxyacetic acids,** ethyl esters, and their derivatives, 993.
α-Aldehydo-δ-(2:2:6-trimethyl-Δ^6-*cyclo*hexenyl)-β-methyl-$\Delta^{\alpha\gamma}$-butadiene, and its phenylsemicarbazone, 586.
Aliphatic compounds, influence of the polar group on energy of hydration of, 952.
substitution in, and Walden inversion, 1525.
***p*-Alkoxybenzoic acids,** liquid-crystal formation in, 1874.
Alkyl groups, polar effects of, 1844.
iodides, action of, with sodium *m*-4-xylyloxide in ethyl alcohol, 141.
radicals, production of, 1024.
4(5)-β-Alkylaminoethylglyoxalines, 489.
Alkylarsines, methylated, 396.
***N*-Alkylphenoxazines,** 1312.
Allenes, spatial configuration of, 989.
Allyl ethers, hydrogenation of, 1365.
4-*O*-Allyl-3-allylresacetophenone, 632.
7-Allyloxy-4-methylcoumarin, 631.
3-Allylresacetophenone, and its dimethyl ether, 630.
4-*O*-Allylresacetophenone, 630.
5-Allylresacetophenone dimethyl ether, 632.
2-Allylresorcinol, 631.
Altrose derivatives, formation of, from glucose derivatives, 1193.
Amines, dissociation constants of, 796.
benzylation of, 16.
aromatic primary, velocity of reactions of, with 2:4-dinitrobromobenzene, 1410.
optically active, stereochemistry of, 410.
tertiary, action of nitrous acid on, 53.
Amino-acids, equilibrium of, with aromatic aldehydes, 210.
optically active, stereochemistry of, 410.
***o*-Amino-sulphides,** acetyl derivatives, rearrangement of, 181.
benzoyl derivatives, rearrangement of, 340.
***o*-Amino-sulphones,** acetyl derivatives, rearrangement of, 181.
Ammonium titanimolybdate, structure of, 580.
Ammonium salts, quaternary, formation of, in benzene solution, 1147.
α-Amylodextrin, constitution and molecular structure of, 1299.
Amylose, molecular size of, and its relationship to starch, 1201.
***p*-*n*-Amyloxybenzoic acid,** 1874.
***n*-Amylurea, γγδ-*tri*chloro-β-hydroxy-,** and its acetyl derivative, 1624.
Anagyrine, and its salts, 11.
Anagyris foetida, alkaloids of, 1053.
α- and β-Anhydrodigitoxigenins, and their acetates, 1050.
α- and β-Anhydrodigitoxigenones, 1050.
Anhydrodigoxigenone, and its derivatives, 1307.
2:2′-Anhydro-2:5-diketo-3-(2′-aminophenyl)*iso*indolinepyrazolidocoline, and its picrate, 1802.
2:2′-Anhydro-2:5-diketo-3-(4′-chloro-2′-aminophenyl)-*iso*indolinopyrazolidocoline, and its sulphate, 1802.
Anilides, halogenation of, 1831, 1835.
Aniline, dielectric constant and density of, 776.
surface tension and partial vapour pressure of aqueous solutions of, 776.
addition of, to olefines, 1279.
effect of inert substances on velocity of reactions of, with 1-bromo- and 1-chloro-nitrobenzenes, 1411.
action of, with diphenylsuccinic anhydrides, 157.
Aniline, 2-bromo-4-nitro-, phthalazine, phthalazone, and phthalimidine derivatives of, 1134.
3:5-*di*halogeno-derivatives, derivatives of, 1005.
Aniline, α-*o*-nitro-, velocity of transformation of, into the β-form, 1860.
Anilines, *mono*halogenated, dissociation constants of, 1821.
2-Anilinobenzenesulphinic acid, 2-*o*-nitro-, 186.
2-Anilinobenzenesulphonylphenyl mercurichloride, 2-*o*-nitro-, 187.
1-Anilinobenzselenazole, and its picrate, 1764.
ω-Anilino-ω-benzylacetophenone, 1032.
α-Anilino*iso*butyric acid, nitroso-, 900.
β-Anilinocrotonic acids, amino-, acetyl derivatives, ethyl esters, 1569.
β-Anilinocrotonochloroanilides, chloro-, 113.
β-Anilinocrotononitroanilides, nitro-, 112.
α-Anilinodibenzyl ketone, 1032.
2-Anilino-*NN*-dimethylenesulphurous acids, 4- and 5-nitro-2-hydroxy-, disodium salts, 809.
3-Anilino-*NN*-dimethylenesulphurous acid, 3-nitro-, disodium salt, 811.
γ-Anilino-γ-ethyl-*n*-pentane. See *tert.*-Heptylaniline.
2-Anilino*iso*indolinone-3-acetic acid, 2′-amino-, and 4′-chloro-2′-amino-, and their lactams, 1802.
chloronitro-, and 2′-nitro-, 1800.
β-Anilino-γ-methylbutane, *p*-toluenesulphonyl derivative, 1280.
2-Anilino-*N*-methylenesulphurous acids, 4- and 5-nitro-2-hydroxy-, sodium salts, 809.
3-Anilino-*N*-methylenesulphurous acid, 3-nitro-, sodium salt, 811.
8-Anilinomethylquinoline, 1145.
1-Anilino-α-naphthaselenazole, 1766.
2-Anilino-1-naphthyl methyl sulphide, 2-*o*-nitro-, 188.
2-Anilinophenyl methyl sulphide, 2-*p*-chloro-*o*-nitro-, and its acetyl derivative, 187.
2-*o*-nitro-, and its acetyl derivative, 187.
2-Anilinophenylmethylsulphone, 2-*p*-chloro-*o*-nitro-, and its acetyl derivative, and 2-*o*-nitro-, benzenesulphonyl derivative, 186.
α-Anilinopropionic acid, *N*-nitroso-, 900.
Anionotropy in cyclic systems, 1156.
β-*p*-Anisidinocrotono-*p*-anisidide, 113.
***o*-4-Anisoylbenzoic acid,** *tetra*chloro-, 1369.
γ-Anisoylbutyric acid, 856.
ε-*p*-Anisylhexoic acid, 1092.
Annual General Meeting, 541.
Anthracene, oxidation of, with selenium dioxide, 903.
Anthracene series, 1102.
1-Anthraquinonyl 2-acetoxy-1-naphthyl sulphide, 1236.
6-bromo-2-hydroxy-1-naphthyl sulphide, 1236.
β-hydroxyethyl sulphoxide, and its β-acetyl derivative, 1237.
4-hydroxy-*m*-tolyl sulphide, 1235.
2-naphthyl ether, 1236.
1-sulphino-6-bromo-2-naphthyl ether, 1236.
1-sulphino-2-naphthyl ether, 1236.
3-sulphino-*p*-tolyl ether, 1236.
1-Anthraquinonyl-β-acetoxyethylsulphone, 1236.
1′-Anthraquinonyl-2-acetoxy-1-naphthylsulphone, 1236.
3-1-Anthraquinonylaminonaphthalomethylimide, and 4- and 5-amino-, benzoyl derivatives, 498.
1′-Anthraquinonyl-6-bromo-2-acetoxy-1-naphthylsulphone, 1236.
1-Anthraquinonyl-β-hydroxyethylsulphone, 1237.
1′-Anthraquinonyl-2-hydroxy-1-naphthylsulphone, 1236.
1′-Anthraquinonyl-4-hydroxy-*m*-tolylsulphone, 1236.
2-α-Anthraquinonyloxy-6-bromo-1-naphthyl *di*sulphide, 1236.

2-α-Anthraquinonyloxy-1-naphthyl *di*sulphide, 1236.
Anthronylacetic acid, 1:5-*di*chloro-, 1104.
Anthronylideneacetic acid, 1104.
Anthronylidenedipropionic acid, 1103.
Anthronylpropionic acids, *di*chloro-, 1103.
Antimalarials, 1143, 1421.
Antimony organic compounds:
Antimony cacodyl. See Bisdimethylantimony.
Apocinchene, constitution of, and its ethyl and methyl ethers, 299.
Apoquinidine, and its salts, 969.
methyl ether, and its salts, 971.
Apoquinine methyl ether, and its salts, 968.
***iso*Apoquinine**, and its salts, 967.
Arabinose, rotatory dispersion of open-chain derivatives of, 696.
Aromatic compounds, polar effects of halogens in, 1827.
***m*-Arsanilic acid.** See Phenylarsinic acid, *m*-amino-.
***p*-Arsanilic acid.** See Phenylarsinic acid, *p*-amino-.
5:5′-Arseno-1(or 3)-carbamylmethylbenziminazole, 157.
5:5′-Arseno-1(or 3)-carboxymethylbenziminazole, 156.
Arsinopimelanilic acid, *p*-*di*chloro-, 291.
Arsinosuberanilic acid, *p*-*di*chloro-, 292.
***p*-Arsonopimelanilic acid**, and its esters, 291.
***p*-Arsonosuberanilic acid**, and its esters, and their sodium salts, 292.
β-Arylaminocrotonic acids, arylamides of, 111.
Aryldiamines, tetrazotisation of, 530.
β-Arylethyl chlorides, velocities of reaction of, with potassium iodide, 1819.
Arylsulphon-1- and -2-naphthalides, substitution in, 1591.
Atomic weight of cæsium, 793.
of calcium, 791.
of carbon, 788.
of iodine, 793.
of lead, 794.
of niobium, 792.
of nitrogen, 789.
of protoactinium, 794.
of radium, 794.
of sodium, 790.
of terbium, 772.
Atomic weights, report of the Committee on, 788.
table of, 795.
Autoxidation, 223, 226.
***cyclo*Azi*tetra*bromobenztriazone**, nitroso-, 1007.
***cyclo*Azi*penta*bromobenztriazone**, nitroso-, 1007.
***cyclo*Azi*penta*chlorobenztriazone**, nitroso-, 1007.
Azides, organic, action of, with aromatic thio-ketones, 530.
Azido-groups, conversion of, into amino-groups, 530.
Azo-compounds, *o*-hydroxy-, metallic derivatives, 1598.
Azo-group as chelating group, 1598.
3-Azoxy-5-pyridylpyrazole, 4-nitro-, 420.

B.

Balance sheets. See Annual General Meeting, 541.
Balata bromide, condensation of, with phenols and phenolic ethers, 1242.
hydrochloride, action of zinc dust and alcohol on, 1239.
α- and β-*cyclo*Balata, 1241.
Barium iodate, solubility of, in salt solutions, 1416.
Beckmann rearrangement, 1223.
Beech, wax of felted coccus of, 391.
Benzaldehyde, bromo-, bromonitro-, and nitro-derivatives, tolylhydrazones, 1620.
Benzaldehyde, ω-bromo-, ω-bromonitro-, ω-chloro- and ω-chloronitro-derivatives, bromo- and chlorophenylhydrazones of, and nitro-derivatives, bromo- and chloro-phenylhydrazidines of, 1007.
o-chloro-, 2:4-*di*nitrophenylhydrazone, 152.
3:4-*di*hydroxy-, derivatives, pyridine synthesis with, 816.
Benzaldehydes, *o*-nitro-, alkaline hydrolysis of azlactones from, 1265.
Benzaldehydechloronitrophenylhydrazone-ω-sulphonic-2-β-acrylic acids, sodium salts, 1800.
Benzaldehyde-2′-nitrophenylhydrazone-ω-sulphonic-2-β-acrylic acid, sodium salt, 1800.
Benzanilide imidochloride, condensation of, with substituted dialkylanilines in presence of anhydrous aluminium chloride, 894.
Benzanilide, 3:5-*di*bromonitro- and 3:5-*di*chloronitro-derivatives, 1006.
1:2-Benzanthraquinonyl-5-acetic acid, 771.
1:9-Benzanthrone-8-carboxylic acid, preparation of, from 8-bromo-1-naphthoic acid, 571.
cyclisation of, to 8:11-ketobenzanthrone, 573.
methyl ester, and 11-hydroxy-, lactone, 575.
Benzene, molecular refraction and polarisation of, 728.
action of aromatic aldehydes on, in presence of aluminium chloride, 72.
complex compounds of, with 2:4-dinitro-2′-methyldiphenyl-6-carboxylic acid, 1856.
Benzene, 1-bromo- and 1-chloro-2:4-*di*nitro-, effect of inert substances on velocity of reactions of, with aniline, 1411.
nitro-, polarisation of, in various solvents, 504.
electrical polarisation of concentrated solutions of, 609.
1:4-*di*nitro-, 1:3:5-*tri*nitro-, and 2:4:6-trisubstituted derivatives of the latter, dipole moments of, 957.
2:4-*di*nitrobromo-, velocity of reactions of, with aromatic primary amines, 1410.
Benzeneazoacetoacetic acid, 3:5-*di*- and 3:4:5-*tri*bromo-, 3:5-*di*chloro-, and 3:5-*di*chloro-4-bromo-, ethyl esters, 1007.
Benzeneazo-γ-bromoacetoacetic acid, 3:5-*di*bromo-, 3:5-*di*chloro-, and 3:5-*di*chloro-4-bromo-, ethyl esters, 1008.
Benzeneazo-γγ′-*di*bromoacetoacetic acid, 3:5-*di*bromo-, 3:5-*di*chloro-, and 3:5-*di*chloro-4-bromo-, ethyl esters, 1008.
Benzeneazo-β-naphthol, 3:5-*di*bromo-, 3:5-*di*chloro-, and 2:3:4:5-*tetra*chloro-, 1007.
4-Benzeneazo-α-naphthol-2-carboxylic acid, 4-*p*-nitro-, 1062.
Benzeneazophenols, 3:5-*di*bromo-, and 3:5-*di*chloro-, 1006.
3-Benzeneazo-2-phenylmethylindoles, 1211.
Benzenesulphonimidoxanthen, 532.
Benzenesulphon-1-naphthalide, bromonitro- and nitro-derivatives, 1593.
Benzenesulphon-naphthalides, *m*-nitro-, and their salts, 1856.
2′-Benzenesulphonylmethylaminodiphenylsulphone, 2-nitro-, 185.
Benzenethiolsulphonic acid, and *p*-bromo-, *o*-nitrophenyl esters, 898.
Benzenyl-4:6-*di*bromo-*m*-tolylhydrazidines, nitro-, 1621.
3:4-Benzfluorene, and its derivatives, 1322.
4:5-Benzhydrindene-1-*spirocyclo*hexane, and its picrate, 1637.
Benzhydrylaminomethyleneacetoacetanilide, 1220.
Benzhydrylaminomethylenemalonic acid, ethyl ester, anilide, 1219.
β-Benzhydrylamino-α-phenylacrylonitrile, 1219.
***N*-Benzhydryl-*N′*-*p*-chlorophenylformamidine**, 1219.

dl- and *d*-**Benzhydrylidene-α-phenylethylamines**, 1782.
N-**Benzhydryl-*N*′-*p*-methoxyphenylformamidine**, 1219.
N-**Benzhydryl-*N*′-β-naphthylformamidine**, 1219.
N-**Benzhydryl-*N*′-phenylformamidine**, 1219.
N-**Benzhydryl-*N*′-*p*-tolylformamidine**, 1219.
Benziminazole-5-arsonic acid, derivatives of, and their trypanocidal action, 155.
Benzo-*mono*- and -*di*-bromo-*m*-toluidides, and nitro-, 1620.
Benzo-β-butylamides, 1078.
Benzo-4′-chloro-2′-nitrophenylhydrazide-2-β-acrylic acid, 1800.
Benzoic acid, 1-acetyl-2-naphthyl ester, 870.
substituted derivatives, electrolytic dissociation of, 346.
o-substituted derivatives, *l*-menthyl esters, rotation of, 1043.
Benzoic acid, 2-iodo-3-hydroxy-, and its 3-acetyl derivative, 856.
p-nitro-, *p*-*sec*.-butylphenyl ester, 140.
p-nitro-, *n*-amyl ester, and 3:5-*di*nitro-, crotonyl and furfuryl esters, 289.
m-*mono*- and 3:5-*di*-nitro-, *l*-menthyl esters, rotation of, 229.
3:5-*di*nitro-, *m*-methoxybenzyl ester, 1123.
Benzoin, *o*-chloro-, and *mm*′-*di*chloro-, 225.
α-Benzoinoxime, compounds of, with bivalent metals, 818.
2-Benzo-*o*-nitroanilidophenyl methyl sulphide, 2-*o*-nitro-, 188.
Benzo-2′-nitrophenylhydrazide-2-β-acrylic acid, 1800.
Benzophenone, 2-bromo-5-nitro-, 1238.
Benzophenoneoxime, rearrangement of, and its α-phenyliminobenzyl ethers, 1226.
Benzo-γ-pyrylium salts. See Chromylium salts.
p-**Benzoquinone**, dipole moment of, 1698.
thermochemistry and kinetics of reaction of, with *cyclo*pentadiene, 829.
addition of, to *cyclo*pentadiene, 1511.
Benzo-*m*-toluidides, nitro-, 1620.
Benzoylacetone, copper salt, 733.
2-Benzoyl-9-acetylcarbazole, 744.
3-Benzoyl-6-acetylcarbazole, 744.
3-Benzoyl 4:6-benzylidene 2-methyl α-methylaltroside, 1197.
2-Benzoylcarbazole, 744.
4-Benzoyldimethyl-α-naphthylamine, and its oxime, 896.
6-Benzoyl-2:7-dimethyl-1:2:3:4-tetrahydronaphthalene, 82.
o-**Benzoylenebenziminazole**, 5-chloro-, 1806.
2-(β-Benzoyl-α-*o*-hydroxyphenylethyl)*cyclo*hexanone, 1117.
2-(β-Benzoyl-α-*o*-hydroxyphenylethyl)*cyclo*pentanone, 1118.
Benzoylnitrophenyl 4-hydroxy-*m*-tolyl sulphides, 1238.
Benzoylnitrophenyl-4-hydroxy-*m*-tolylsulphones, 1238.
α-**Benzoyloxy*iso*butyric acid**, methyl ester, 716.
2- and **4-Benzoylphenyl** *p*-tolyl ethers, 4- and 2-nitro-, 1238.
6-Benzoylthiodiphenylamine, 3-nitro-, 342.
2-Benzoyl 3-*p*-toluenesulphonyl 4:6-benzylidene α-methylglucoside, 1197.
3-Benzoyl 2-*p*-toluenesulphonyl 4:6-benzylidene α-methylglucoside, 1198.
Benzselenazole, 1-amino-, and its acetyl derivative, 1763.
1-hydroxy-, and 1-thiol-, 1765.
Benzthiazoles, bromo-, chloro-, and iodo-hydroxy-, 1760.
1-hydroxy-, mobility and ultra-violet absorption of derivatives of, 1755.
Benzyl, free, preparation of, 381.
Benzyl bromide, rate of reaction of, with nitrobenzylaniline and its derivatives, 16.
effect of substituents on reaction of, with α-picoline and pyridine in various solvents, 519.
2:4-*di*nitro-, 1843.
chlorides, substituted, velocities of reaction of, 1815.
fluoro-, 1817.
Benzylacetone, *o*-hydroxy-, reactions of, 646.
ω-**Benzylacetophenone**, ω-bromo-, action of, with aniline, 1032.
Benzylaniline, 3- and 4-chloro-4′-nitro-, 18.
nitro-, and its derivatives, rate of reaction of benzyl bromide with, 16.
Benzyl-β-bromovinylmalonic acid, ethyl ester, 721.
α-**Benzyl-γ-butyrolactone**, 724.
α-**Benzyl-γ-butyrolactone-α-carboxylic acid**, 724.
iso-α-**Benzylcrotonic acid**, and its silver salt and ethyl ester, 725.
Benzyldimethylallylarsonium picrate, 398, 399.
Benzyldimethylamine, *p*-amino- and *p*-nitro-, derivatives of, 872.
Benzyl-β-dimethylaminoethylmalonic acid, ethyl ester, derivatives of, 724.
Benzyldimethyl-*n*-propylarsonium picrate, 397.
o-**Benzylenebenziminazole**, and 5-chloro-, 1806.
4-Benzylethylaminobenzophenone, and its oxime, 896.
β-**(Benzylethylamino)triethylamine**, and β-*o*-amino-, and β-*o*-nitro-, 1424.
4:6-Benzylidene 2:3-anhydro-α-methylalloside, 1196.
4:6-Benzylidene 2:3-anhydro-α-methylmannoside, 1198.
Benzylidene-*p*-*tert*.-butylbenzylamine, 1848.
Benzylidenediacetophenones, *o*-hydroxy-, reactions of, 85, 88, 1115, 1118.
Benzylidenedi-*p*-methoxyacetophenone, *o*-hydroxy-, 89.
4:6-Benzylidene 2:3-dimethyl α-methylaltroside, 1197.
4:6-Benzylidene α-methylaltroside, 1199.
4:6-Benzylidene 2-methyl α-methylaltroside, 1197.
4:6-Benzylidene 3-methyl α-methylaltroside, 1198.
dl- and *d*-**Benzylidene-*p*-phenylbenzhydrylamine**, 1784.
Benzylmalonic acid, ethyl ester, condensation of, with ethyl α-bromosuccinate and fumarate, 420.
4-Benzylmethylaminobenzophenone, 896.
Benzylmethyldiethylarsonium salts, 398.
5-Benzyloxyacetophenone, 2-hydroxy-, and its 2-benzoyl derivative, 869.
m-**Benzyloxybenzaldehyde**, 1540.
3-Benzyloxybenzaldehyde, 6-nitro-, and its derivatives, 1266.
Benzyloxybenzoic acids, bromo-, chloro-, and fluoro-1839.
5-Benzyloxycinnamic acid, 2-nitro-α-amino-, α-benzoyl derivative, 1266.
5-Benzyloxydibenzoylmethane, 2-hydroxy-, 869.
7-Benzyloxyflavanone, 867.
6-Benzyloxyflavone, 869.
7-Benzyloxyflavone, 868.
7-Benzyloxy-4′-methoxyflavanone, 867.
7-Benzyloxy-4′-methoxyflavone, 868.
m-**Benzyloxyphenylacetic acid**, 1541.
4-Benzyloxyphenyl 4-benzyloxystyryl ketone, 2-hydroxy-, 867.
4-Benzyloxyphenyl 3:4-dibenzyloxystyryl ketone, 2-hydroxy-, 867.
4-Benzyloxyphenyl 4-methoxystyryl ketone, 2-hydroxy-, 867.
4-Benzyloxyphenyl styryl ketone, 2-hydroxy-, 867.
5-Benzyloxytoluene, 2-nitro-, 1266.
Benzylpyridinium bromide, 2:4-*di*nitro-, 1843.
Benzylsuccinamic acid, *o*-amino-, and *o*-nitro-, 1278.

Benzyltrimethylammonium chloride hydrochloride, *p*-amino-, 872.
iodide, *p*-amino-, acetyl derivative, 872.
Benzyltrimethylstibonium picrate, 399.
Benzylvinylmalonic acid, ethyl ester, 721.
Bergapten, and its derivatives, synthesis of, 813.
Bile acids, synthesis of compounds related to, 429, 445, 1633.
Bis-2-aceto-*p*-chloro-*o*-nitrophenylamidophenyl *di*sulphide, 1264.
Bis-2-amino-α-naphthyl *di*selenide, 1766.
2:4-Bisbenzeneazophenol, 3:5:3′:5′-*tetra*bromo-, and -*tetra*chloro-, 1006.
Bis-3-bromocamphor-10-mercury, 536.
***s*-Bis-6-*mono*- and -4:6-*di*bromo-*m*-tolylurea**, 1620.
Bis-(6-carboxymethylhomopiperonyl)-β-piperonylethylamine, 665.
2:3-Bis*di*chloroacetyl benzylidene α- and β-methylglucosides, 1180.
4:6-Bis*di*chloroacetyl 2:3-dibenzoyl α-methylglucoside, 1181.
Bis-3-chlorocamphor-10-mercury, 536.
Bis-2-*p*-chloro-*o*-nitroanilinophenyl *di*sulphide, 186.
Bis(di-*n*-amylsulphide)palladium *di*chloride and ***di*nitrite**, 1558.
Bis(dibenzylsulphide)palladium *di*chloride, 1559.
Bis(dibutylsulphide)palladium salts, 1558.
4:4′-Bisdiethylaminodiphenylmethane, *di*nitro-, 58.
Bisdiethylantimony, 371.
Bis(diethylsulphide)palladium *di*nitrite, 1559.
Bis-(3:4-dimethoxyphenyl)methylsuccinic acid, 641.
5:12-Bis-*p*-dimethylaminophenylchromanorufan, 1404.
Bisdimethylantimony, 367.
Bis(dimethylsulphide)palladium *di*nitrite, 1559.
Bisdiphenylene-ethylene, 2:2′-*di*fluoro-, dipole moment and structure of, 987.
2:2′-*di*- and 2:2′:7:7′-*tetra*-nitro-, 1610.
1:4-Bisdiphenylmethylene-$\Delta^{2:5}$-*cyclo*hexadiene, 1404.
Bis(diphenylsulphide)palladium *di*chloride, 1559.
Bis(dipropylsulphide)palladium salts, 1558.
4:4′-Bisethylnitrosoaminodiphenylmethane, 57.
αδ-Bis-(3-methoxy-4-ethoxyphenyl)-α-methylbutan-β-one, and ***di*nitro-**, 121.
6:7:3′:4′-Bismethylenedioxy-2-benzenesulphonyl-1:2:3:4-tetrahydroprotopapaverine, 667.
6:7:3′:4′-Bismethylenedioxy-2-carbamyl-6′-methoxymethyl-1:2:3:4-tetrahydroprotopapaverine, 666.
6:7:3′:4′-Bismethylenedioxy-8:6′-methyleneprotolaudanosine and its methine, and their derivatives, 666.
6:7:3′:4′-Bismethylenedioxy-8:6′-methylene-1:2:3:4-tetrahydroprotopapaverine, and its *p*-nitrobenzoyl derivative, 666.
6:7:3′:4′-Bismethylenedioxy-2- and -6′-methyl-1:2:3:4-tetrahydroprotopapaverines, and their picrates, 666.
Bis(methylethylsulphide)palladium *di*chloride, 1558.
***ON*-Bis-2:4-*di*nitrophenyl-*O*-aminophenol**, 1313.
Bis(phenylbutylsulphide)palladium *di*chlorides, 1559.
αα-Bis(phenylthio)acetone, 1557.
αγ-Bis(phenylthio)propane, 1557.
Bispyrimidazine, thiol*tri*hydroxy-, 469.
1-β-Bis-(8′-quinolylmethyl)aminomethylpiperidine, 1426.
Bis-(8-quinolylmethyl)-β-diethylaminoethylamine, 1426.
***s*-Bis-(8-quinolylmethyl)dimethylethylenediamine *di*hydrobromide**, 1426.
1:4-Bis-(8′-quinolylmethyl)piperazine, 1426.
Bis(tri-*n*-amylarsine)palladium *di*chloride, 1561.
Bis(tri-*n*-amylphosphine)palladium *di*chloride, 1560.
Bis(tri-*n*-butylarsine)palladium *di*chloride, 1561.
Bis(tri-*n*-butylphosphine)palladium salts, 1560.
Bis(triethylarsine)palladium *di*nitrite, 1561.
Bis(trimethylarsine)palladium *di*chloride, 1560.
Bis(tripropylarsine)palladium salts, 1561.
Bis(tri-*n*-propylphosphine)palladium salts, 1560.
Bis-*o*-urethanophenyl *di*selenide, 1765.
Borotungstic acid, structure of, 580.
Brauner Memorial Lecture, 1876.
Bromine, effect of catalysts on addition of, to ethylene derivatives, 984.
Hydrobromic acid, addition of, to non-terminal double bonds, 1108.
to double and triple bonds, 1572.
reactivity of alcohols with, 131.
***neo*Brucidine** *di*methiodide, 1292.
Brucine, 935, 1291, 1685.
Buffers, new, 912.
***cyclo*Butane-1:1-dicarboxylic acid**, and its sodium salt, dissociation constants of, 1627.
(+)β-Butanesulphonic acid, 1078.
Butyl, free, 380.
Butyl alcohol, action of, with diphenylsuccinic anhydrides, 157.
(+)β-Butyl *di*selenide, 1079.
(−)β-Butyl *n*-butyl ether, 1079.
***di*sulphide**, 1078.
***tert.*-Butyl chloride**, hydrolysis of, 255.
***p-tert.*-Butylbenzaldehyde**, and its *p*-nitrophenylhydrazone, 1848.
***tert.*-Butylbenzene**, and ***p*-nitro-**, dipole moments of, 480.
***p-tert.*-Butylbenzyl bromide**, 1844.
***p-tert.*-Butylbenzylamine**, and its derivatives, 1848.
***p-tert.*-Butylbenzylidenebenzylamine**, 1848.
***iso*Butylene*di*aminoplatinum, *di*chloro-**, 843.
***iso*Butylenediamine**, and its derivatives, 842.
***N*-β-Butylpiperidines**, 1077.
(−)β-Butylthiol, 1078.
***p-tert.*-Butyltoluene**, dipole moment of, 480.
(−)β-Butyl-*p*-toluidine, 1078.
5-*tert.*-Butyl-*m*-xylene, *tri*nitro-, dipole moment of, 963.
Butyric acid, "equilibration" of, in presence of sodium hydroxide in deuterium oxide, 1742.
Butyric acid, γ-bromo-α-amino-, hydrobromide, 766.
***iso*Butyric acid**, specific heats of aqueous mixtures of, 1166.
***iso*Butyric acid**, α-chloro-, methyl ester, 1059.

C.

Cadinene group, 476.
Cadmium compounds, magnetic susceptibility of, 495.
Cæsium, at. wt. of, 793.
Cæsium cobalt chloride, structure of, 359.
thallic enneachloride, structure of, 1008.
Calcium, at. wt. of, 791.
Calcium carbonate and sulphate, equilibria of water and, 383.
Calorimeters, thermocouple vacuum, 1436.
Camphenilene, Snitter's, 1621.
Camphor, mercury derivatives of, 535.
Camphor, 3-bromo-, and 3-chloro-, mercurihalides of, 536.
3-bromo-10-iodo-, and 3-chloro-10-iodo-, 536.
Camphorsulphinic acids, 3-bromo-, and 3-chloro-, 536.
Canavanine, 763.
Cannabinolactonic acid, preparation of, 998.
Carbamylmethylbenziminazole-5-arsonic acid, 156.
Carbazole series, Friedel–Crafts reaction in, 741.
3-Carbethoxy-1-(3′:5′-*di*bromophenyl)pyrazole, 4-hydroxy-, 1008.
3-Carbethoxy-1-(3′:5′-*di*chlorophenyl)pyrazole, 5-bromo-4-hydroxy-, and 4-hydroxy-, 1008.
α-Carbethoxyethyl sulphite, 1061.

3-Carbethoxy-4-hydroxy-1-bromonitrotolylpyrazoles, and 5-chloro-, 119, 120.
3-Carbethoxy-4-hydroxy-1-nitrotolylpyrazoles, and 5-bromo-, and 5-chloro-, 117, 119.
1-Carbethoxy-4-methyl*cyclo*hexane-2-α-cyanoglutaric acid, ethyl ester, 478.
1-Carbethoxy-4-methyl*cyclo*hexane-2-α-cyano-α′-methylsuccinic acid, ethyl ester, 479.
1-Carbethoxy-4-methyl*cyclo*hexane-2-α-cyanosuccinic acid, ethyl ester, 479.
1-Carbethoxy-4-methyl*cyclo*hexane-2-α-glutaric acid, ethyl ester, 478.
1-Carbethoxy-4-methyl*cyclo*hexane-2-α′-methylsuccinic acid, ethyl ester, 479.
1-Carbethoxy-4-methyl*cyclo*hexane-2-succinic acid, ethyl ester, 479.
3-Carbethoxy-1-(4′-nitro-*o*-tolyl)-4-pyrazolone, 5:5-*di*chloro-, 119.
1-Carbethoxy*cyclo*pentane-2-acetonitrile, 475.
1-Carbethoxy*cyclo*pentane-2-succinic acid, and α-cyano-, ethyl esters, 475.
α-(*trans*-2-Carbethoxy*cyclo*pentyl-γ-phenylbutyric acid, α-cyano-, ethyl ester, 1538.
Carbohydrates and their derivatives, rotatory dispersion of, 295, 1658.
additive compounds of, 648.
5-Carbomethoxyanilino-*NN*-dimethylenesulphurous acid, 2-hydroxy-, disodium salt, 810.
α-Carbomethoxyethyl carbonate, 1059.
8-(*o*-Carbomethoxyphenyl)-1-naphthoic acid, and its methyl esters, 571.
2-(β-Carbomethoxypropionyl)-1-*n*-octyl-Δ^1-*cyclo*pentene, 1543.
α-Carbomethoxy*iso*propyl carbonate, 1059.
Carbon, at. wt. of, 788.
atoms, saturated, substitution at, 236, 244, 255.
rings, fused, 436, 1065, 1069.
Carbon *tetra*chloride, molecular refraction and polarisation of, 728.
*sub*oxide, preparation of, 493.
dipole moment of, 1699.
*mon*oxide, catalytic combustion of, 32.
catalytic effect of hydrogen on flames of, 144.
explosions of mixtures of, with oxygen, 160, 165.
*di*sulphide, additive compounds of, with aryldialkylphosphines, 1790.
Carbonic acid, esters, pyrolysis of, 1054.
Carbonyl sulphide, kinetics of reaction of, with water, 1033.
Carbostyril derivatives, absorption spectra and constitution of, 1653.
***o*-Carboxybenzo-2′-bromo-4′-nitrophenylhydrazide,** 1813.
***o*-Carboxybenzo-2′:6′-*di*bromo-4′-nitrophenylhydrazide,** 1814.
***o*-Carboxybenzo-2′-chloro-4′-nitrophenylhydrazide,** 1813.
***o*-Carboxybenzo-2′:6′-*di*chloro-4′-nitrophenylhydrazide,** 1814.
***o*-Carboxybenzo-4′-nitro-2′-methylphenylhydrazide,** 1812.
***o*-Carboxybenzonitrophenylhydrazides,** 1811.
4-Carboxydiphenyl ether, 2′:4′-*di*nitro-2′-amino-, and its 2:4-dinitrophenyl ester, 200.
5-Carboxydiphenylamine, 2′:4′-*di*nitro-2-hydroxy-, and its 2:4-dinitrophenyl ester, 200.
2′-Carboxydiphenylsulphone, 2-amino-, acetyl derivative, 1237.
2-(3′-Carboxy-4′-hydroxybenzylidene)-1-hydrindone, and its ethyl ester, 941, 945.
Carboxymethylbenziminazole-5-arsonic acid, 156.
2-Carboxy-1-methyl*cyclo*hexane-1-acetic acid, 737.
2-Carboxy-4-nitrophenyl 4-hydroxy-*m*-tolyl sulphide, and its derivatives, 1237.
4-Carboxy-2-nitrophenyl 4-hydroxy-*m*-tolyl sulphide, and its acetyl derivative, 1237.
p-tolyl ether, and its 3-methanesulphonyl derivative, 1238.
2′-Carboxy-4′-nitrophenyl-4-hydroxy-*m*-tolylsulphone, 1238.
4′-Carboxy-2′-nitrophenyl-4-hydroxy-*m*-tolylsulphone, 1237.
1-Carboxy*cyclo*pentane-2-succinic acid, 476.
2-(*cis*- and *-trans*-2′-Carboxy*cyclo*pentyl)-3:4-dihydronaphthalene lactones, 1-hydroxy-, 1539.
α-(*cis*-2-Carboxy*cyclo*pentyl)-γ-phenylbutyric acid, 1538.
α-(*trans*-2-Carboxy*cyclo*pentyl)-γ-phenylbutyric acid, and α-cyano-, 1538.
2-(2′-*trans*-Carboxy*cyclo*pentyl)-1:2:3:4-tetrahydronaphthalene, 1540.
2-Carboxyphenyl β-hydroxyethyl sulphide and sulphoxide, 1237.
4-Carboxyphenylarsonic acid, 3-amino-, formation of, from 3-nitro-4-methylphenylarsonic acid, 470.
action of hydrobromic acid on, 470.
2-Carboxyphenyl-β-hydroxyethylsulphone, 1237.
4-(3″-Carboxyphenyl)-2:3-indeno(3′:2′)chromylium chloride, 7-hydroxy-4-(4″-hydroxy)-, 945.
α-*p*-Carboxyphenylsulphonyl-α-phenylsulphonylethane, methyl ester, 20.
***dl*-, *d*-, and *l*-α-*p*-Carboxyphenylsulphonyl-α-phenylthioethanes,** and their methyl esters, 19.
α-*p*-Carboxyphenylsulphonyl-α-*p*-tolylsulphonyl-α-phenylthioethane, and its resolution, 20.
Carvacrol, dipole moment of, 480.
Carvomenthols, and their derivatives, 1138.
Carvomenthone, rotatory dispersion of, 709.
***l-iso*Carvomenthone,** 1138.
***l-iso*Carvomenthylamine,** 1138.
Carvone series, 1138.
Caryophyllenes, 532.
and their derivatives, 1581.
Caryophyllene series, 1297.
Catalysis, energetics of, 393, 1190.
Catalytic hydrogenation, temperature coefficient of, 1190.
***d*-Catechin,** conversion of, in cyanidin chloride, 426.
Cells, physiological, chemistry and biology of, 201.
Cerium :—
Ceric sulphates, 802.
Cerous hydroxide, reaction of, with hydrogen peroxide, 362.
***p*-Cetyloxybenzoic acid,** 1874.
Cevanthridine, and its salts, 124.
Cevine, 124.
Chalkones, and their oxidation, 866.
Charcoal, adsorption on, 889.
suspensions, p_H of, 889.
as catalyst of stereoisomeric change in sulphoxides, 974.
Chelation, 628.
Chlorine :—
Hydrochloric acid, reaction of, with methyl alcohol, 599.
***tri*Chlorohydroxy-amines,** aliphatic, 1623.
Cholanthrene, synthesis of, 770.
and its picrate, 667.
Cholestanone, derivatives of, 1392.
Cholesterol, hydrocarbons from, dehydrogenation of, 645.
action of selenium on, 1391.
Chromanorufan, 5:12-*di*hydroxy-, 1404.
Chromenochromones, 993.
Chromium *sesqui*oxide, heat of adsorption of gases on mixtures of, with zinc oxide, 1487.
Chromone group, synthesis in, 866, 868.
Chromylium salts, synthesis of, 941.

Chrysene, derivatives of, 1412.
Cinchona alkaloids, 1094.
modified, 966.
Cinnamaldehyde *di*- and *tri*-bromo-, and bromo- and chloro-nitro-phenylhydrazones, 92.
2′-Cinnamamidodiphenyl sulphide, 2-nitro-, 1264.
Cinnamic acid, 2-acetyl-1-naphthyl and 2-phenylacetyl-1-naphthyl esters, 870.
Cinnamic acid, *o*- and *p*-nitro-α-amino-, α-benzoyl derivatives, 1267.
2-Cinnamo-*o*-nitrophenylamidophenyl methyl sulphide, 1264.
ω-Cinnamoyl-2-acetyl-1-naphthol, 870.
Cinnamyl *iso*propenyl ether, 1364.
***C*-Cinnamylacetoacetic acid**, ethyl ester, 1364.
10-Cinnamylanthrone, 1:5-*di*chloro-, 1104.
β-Cinnamyloxy-α-cinnamylcrotonic acid, ethyl ester, 1364.
β-Cinnamyloxycrotonic acid, ethyl ester, 1364.
Citric acid, anhydrous, crystallography of, 130.
Clovene, 1297.
Clovenic acid, and its anhydride, and their derivatives, 1297.
Coagulation in smokes, 268.
Coal ash, Northumberland, gallium and germanium from, 566.
Cobalt cæsium chloride, structure of, 359.
sulphide, precipitated, composition and properties of, 1459.
Cobalt organic compounds :—
Cobaltic benzeneazo-naphthoxides, -phenoxide and -*p*-tolyloxide, 1600.
3-tolueneazo-*p*-tolyloxides, 1600.
Columbium. See Niobium.
Constitution and trypanocidal activity, 155.
Copper : —
Cupric compounds, quadricovalent, planar structure of, 731.
Copper organic compounds :—
Copper benzoinoxime, and its dichloride, 821.
Cupric benzeneazo-naphthoxides, -phenoxide and -*p*-tolyloxide, 1599.
3-tolueneazo-*p*-tolyloxides, 1599.
3:4-Coumareno(2″:3″)-flavylium chloride, 7-hydroxy-, 944.
Coumarin, 8-amino-7-hydroxy-, and its 8-acetyl derivative, 815.
Coumarins, synthesis of, 1031.
***o*-Cresol**, 3-nitro-, 337.
***m*-Cresol**, 4-bromo-6-nitro-, 1423.
Crops, chemistry in production of, 48.
Crotonic acid, "equilibration" of, in presence of sodium hydroxide in deuterium oxide, 1742.
β-Crotono-*m*-chloroanilide, β-amino-, 114.
β-Crotono-*p*-phenetidide, β-*p*-amino, 113.
Crotonoxylidides, β-amino-, 113.
Cryptococcus fagi, wax of, 391.
Curare alkaloids, 1381.
Curie Memorial Lecture, 654.
Cyanidin chloride, formation of, from *d*-catechin, 426.
tetramethyl ether, bromo-, bromide, 428.
Cyanogen, and its halides, physical properties of, 1001.
electric moment of, 855.
Hydrocyanic acid, studies on, 674.
auric and cuprous salts, complex anions of, 100.
(+)β-butyl ester, 1080.
Cyclic compounds, anionotropy and prototropy in, 1156.
***p*-Cymene**, and its 2- and 3-halogeno-derivatives, dipole moments of, 480.
Cytisine picrate, 11.
benzenesulphonyl derivative, 1054.

D.

Daphnetin-3-carboxylic acid, 816.
Decahydro-1:2:3:4-dibenzanthraquinone, and its diacetate, 1107.
Decahydro-5:6:7:8-dibenznaphthaquinyl *di*acetate, 1106.
***cis*-β-Decalone**, synthesis of, 1067.
Dehydrohomoapofenchocamphoric acid, ethyl ester, 1128.
Dehydrolumisteryl acetate, 1223.
Dehydronorcaryophyllenic acid, 533.
Dehydro-"sulphite-liquors lactone" dimethyl ether, synthesis of, 1576.
Density, determination of, with the micropyknometer, 1220.
Deuterium, reaction of, with ethylene, at nickel surfaces, 1701.
use of, as "indicator" in study of tautomerism, 1735.
Deuterium hydroxide, rate of diffusion of, in water, 1273.
oxide, selective adsorption of, 1545.
association of, with water in dioxan solutions, 822.
Deuterium organic compounds, 492.
Diacetanilide, **3:5-*di*-** and **2:3:4:5:6-*penta*-bromo-**, 1006.
Diacetone-glucose, preparation of, 1874.
3:6-Diacetylcarbazole, 742.
4:4′-Diacetyldiphenylamine, 2-nitro-, 743.
3:6-Diacetyl-9-methylcarbazole, 742.
5:4′-Diacetyl-1-phenylbenzotriazole, 743.
***l*-Diacetyltartaric** anhydride, 846.
Dialkylaminobenzophenones, synthesis of, 894.
Dialkylanilines, substituted, condensation of benzanilide imidochloride with, 894.
Dialkylarsines, methylated, 396.
1:3-Diallyl-7-methylxanthine, 1366.
2:6-Diallyloxy-7-methylpurine, 1366.
3:5-Diallylresacetophenone, and its dimethyl ether, 632.
Diamines, aromatic, action of ethyl acetoacetate on, 1568.
Di-*n*-amyl sulphoxide, 1556.
Di-*n*- and **-*dl*-amylcadmium**, 44.
Di-*n*-amyldiamyl-lead, 42.
Di-*n*-amyldi-*n*-hexyl-lead, 42.
Di-*n*-amyl-lead *di*nitrate, and its dihydrate, 43.
derivatives, 42.
Di-*dl*-amyl-lead *di*chloride, 42.
Di-*n*-amylmercury, and its derivatives, 40.
αγ-Dianisoylpropane, 856.
βγ-Dianisyladipic-*b*-acid, and its methyl ester, 1412.
aζ-Di-*p*-anisylhexane, 1092.
δδ-Di-*p*-anisylvalerolactone, 856.
Di-(β-1-anthraquinonyloxyethyl) *di*sulphide, 1237.
Diazomethane, preparation of, and its homologues, 286.
4-Diazonaphthalene 1-oxide, 2-nitro-, 673.
Diazotisation, mechanism of, 871.
Dibenzanthronedicarboxylic acid preparation of, from 8-bromo-1-naphthoic acid, 571.
cyclisation of, to diketodibenzanthrone, 573.
1:2:5:6-Dibenzfluorene, 1325.
2:9-Dibenzoylcarbazole, 744.
Dibenzoylcarbinol, 84.
αγ-Dibenzoyl-β-*o*-hydroxyphenyl-α-phenylpropane, 1117.
Dibenzoylmethane, *o*-hydroxy-, 869.
Dibenzyl. See *s*-Diphenylethane.
Dibenzyl sulphite, ***di*-*p*-iodo-**, 1818.
Di-(α-benzylethyl) sulphide, 1084.
3:4-Dibenzyloxybenzaldehyde, 867.

αγ-Di-(*p*-bromophenyl)-αγ-diphenylallene, 992.
αγ-Di-(*p*-bromophenyl)-αγ-diphenylpropyl alcohol, 992.
Di-*n*-butyldi-*dl*-amyl-lead, 42.
Di-*n*- and -*iso*-butyldi-*n*-amyl-lead, 42.
Di-*n*-butyldi*iso*butyl-lead, 42.
Di-*n*-butyl-lead *di*chloride, 41.
*di*nitrate, 43.
***NN*-Di-*n*-butyl*di*thiocarbamic acid**, nickel complex salt, 624.
Di(carboxynitrophenoxy-*m*-tolyl) *di*sulphides, 1238.
Dicinnamylacetoacetic acid, ethyl ester, 1364.
Dicyclic compounds, reduced, synthesis of, 1065.
Dideuteromalonic deuteracid, 492.
βγ-Di-3:4-dimethoxyphenyladipic-α-acid, and its methyl ester, 1414.
γ-Di-(3:4-dimethoxyphenyl)itaconic acid, and its anhydride, 641.
Dielectric constant of solvents in relation to molecular polarisation in solution, 773.
Dielectric polarisation. See under Polarisation.
Diels–Alder reaction with arylhexadienes, 429.
Diene syntheses, thermochemistry and kinetics of, 828.
1:5-Diethoxybenzthiazole, 1760.
***p*-Diethoxydiphenylhydrobalata**, 1244.
***p*-Diethoxydiphenylhydrogutta-percha**, 1244.
2:4-Diethoxyethylbenzene, 2:4-*di*-β-hydroxy-, 1099.
4:5-Diethylacetophenone, 2-hydroxy-, and its derivatives, 302.
α-Diethylamino-δ-aminopentane, and its dipicrate, 1409.
8-(β-Diethylaminodiethylaminomethyl)quinoline, salts, 1425.
α-Di(ethylamino)di(propylamino)platinous chloride dihydrate, 1248.
8-(β-Diethylaminoethylaminomethyl)quinoline *tri*hydrobromide, 1426.
9-β-Diethylaminoethylaminophenanthridine, 3-bromo-, salts of, 1409.
β-Diethylaminoethylbutylamines, picrates of, 1425.
8-(β-Diethylaminoethylbutylaminomethyl)quinolines, salts, 1426.
8-(β-Diethylaminoethylmethylaminomethyl)quinoline *tri*hydrobromide, 1425.
β-Diethylaminoethylpropylamine, and its picrate, 1425.
8-(β-Diethylaminoethylpropylaminomethyl)quinoline, salts, 1425.
4-Diethylamino-3-methylbenzophenone, 896.
δ-Diethylamino-α-methylbutylamino-9-phenanthridine, and 3-bromo-, and their salts, 1409.
8-Diethylaminomethylquinoline, and its hydrobromide, 1144.
α- and **β-Di(ethylamino)platinous** salts, 1213.
3:4-Diethylanisole, 303.
Diethylantimonic acid, 371.
3:6-Diethylcarbazole, 743.
Diethylcyanogold, 1028.
Diethyl*di*cyanogold, 1028.
Diethyldi-*n*-amyl-lead, 42.
Diethyldi-*n*-butyl-lead, 42.
1:2:3:4-Diethylidenesorbitol, 426.
Diethyl ketone, photolysis of, 1154.
2:4-*di*nitrophenylhydrazone, 152.
3:4-Diethylphenetole, 303.
3:4-Diethylphenol, and its derivatives, 302.
3:6-Diethyl-1:2:3:4-tetrahydrocarbazole, 743.
Digitalis glucosides, 1050, 1305.
***iso*Digoxigenic acid**, and its pyridine salt and methyl ester, 1308.
Digoxigenin, constitution of, 1305.
***iso*Digoxigeninic acid**, methyl ester, 1308.
***n*- and *iso*-Digoxigenones**, and their derivatives, 1307.
***iso*Digoxigenonic acid**, methyl ester, 1308.
***iso*Digoxigonic acid**, and its methyl ester, 1308.
Di-$\Delta^{1:1}$-*cyclo*hexene, 1106.
s-Di-Δ^{1}-*cyclo*hexenylacetone, and its semicarbazone, 983.
s-Di*cyclo*hexylacetone, 983.
Di-*n*-hexylmercury, 40.
αβ-*endo*-9:10-Dihydroanthraquinyl-9:10-β-phenylpropionic acid, 1103.
αβ-*endo*-9:10-Dihydroanthraquinyl-9:10-propionic acids, 1103.
Dihydroapoquinine, hydroxy-, and its salts, 968.
Dihydrobrucidine, Hofmann degradation of, 1685.
salts of, 1293.
Dihydrocinchonidine, α- and α′-chloro-, and their salts, 1097.
Dihydrocinchonine, α- and α′-chloro-, and their salts, 1096.
Dihydrodigoxigenone, and its derivatives, 1307.
1:4-Dihydro-1:2:3:4-di*cyclo*pentenoanthraquinyl *di*acetate, 1107.
5:8-Dihydro-5:6:7:8-di*cyclo*pentenonaphthaquinyl *di*acetate, 1106.
Dihydrofucosterols, and their acetates, 1206.
Dihydroguaiaretic acid, diethyl ether, and *di*bromo-, and *di*nitro-, 122.
Dihydroquinidines, α- and α′-chloro-, and their salts, 1097.
Dihydroquinine, α- and α′-chloro-, and their salts, 1095.
Dihydro-α-santalylacetic acid, 314.
2:5-Diketo-3-(2′-aminophenyl)*iso*indolinopyrazolidocoline, and its acetyl derivative, 1801.
1:4-Diketo-3-(2′-bromo-4′-nitrophenyl)tetrahydrophthalazine, 1813.
1:4-Diketo-3-(2′:6′-*di*bromo-4′-nitrophenyl)tetrahydrophthalazine, 1814.
2:5-Diketo-3-(4′-chloro-2′-aminophenyl)*iso*indolinopyrazolidocoline, and its acetyl derivative, 1802.
2:5-Diketo-3-(chloronitrophenyl)*iso*indolinopyrazolidocolines, 1801.
1:4-Diketo-3-(2′-chloro-4′-nitrophenyl)tetrahydrophthalazine, 1813.
1:4-Diketo-3-(2′:6′-*di*chloro-4′-nitrophenyl)tetrahydrophthalazine, 1814.
2:11-Diketo-6:15-dimethoxyhexahydrochrysene-*a*, 1413.
2:11-Diketo-5:14-dimethoxyhexahydrochrysene-*b*, 1413.
2:4-Diketo-8-methylhydrindane, and *di*chloro-, 737.
Diketone, $C_{11}H_{16}O_2$, and its derivatives, from 2-acetyl-1-methyl-Δ^{1}-*cyclo*hexene, 737.
α-Diketones, action of, with periodic acid, 1467.
1:5-Diketones, unsymmetrical, reactions of, 1115.
1:4-Diketo-3-(nitroaryl)tetrahydrophthalazines, preparation of, 1808.
1:4-Diketo-3-(4′-nitro-2′-methylphenyl)tetrahydrophthalazine, and its silver salt, 1812.
2:5-Diketo-3-(2′-nitrophenyl)*iso*indolinopyrazolidocoline, 1801.
1:4-Diketo-3-(4′-nitrophenyl)tetrahydrophthalazine, and its silver salt, 1811.
1:4-Diketo-3-phenyltetrahydrophthalazine, 1814.
Diketosuccinic acid, ethyl methyl ester, nitrotolylhydrazones, 120.
2:11-Diketo-5:6:13:14-tetramethoxyhexahydrochrysene-*a*, 1414.
2:4-Dimethoxybenzoic acid, *o*-acetylphenyl ester, 869.
β-(3:4-Dimethoxybenzoyl)-Δ^{3}-crotonolactone-γ-carboxylic acid, ethyl ester, 1579.
β-3:4-Dimethoxybenzoyl-α-(3′:4′-dimethoxybenzylidene)-β-chloromethylpropionolactone, 1579.
β-3:4-Dimethoxybenzoyl-α-(3′:4′-dimethoxybenzylidene)-β-methoxymethylpropionolactone, 1579.

β-3:4-Dimethoxybenzoyl-α-(3′:4′-dimethoxybenzylidene)-β-methylenepropionic acid, 1579.
β-3:4-Dimethoxybenzoyl-α-(3′:4′-dimethoxybenzylidene)propionic acid, and its lactone, 640.
β-(3:4-Dimethoxybenzoyl)-β-hydroxymethylenepropionic acid, ethyl ester, 1579.
β-(3:4-Dimethoxybenzoyl)propionic acid, ethyl ester, 1579.
Di-(*o*-methoxybenzyl), α-amino-, and its derivatives, 1122.
Dimethoxybenzylideneglycines, barium salts, 215.
6:7-Dimethoxy-1-(6′-bromo-3′:4′-dimethoxyphenyl)-3-hydroxymethylnaphthalene-2-carboxylic acid, 4-hydroxy-, lactone, 642.
6:7-Dimethoxy-1-(6′-bromo-3′:4′-dimethoxyphenyl)-naphthalene-2-carboxylic acid, 4-hydroxy-, ethyl ester, 642.
6:7-Dimethoxy-2-carboxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-3-glycollic acid, 4-hydroxy-, lactone, and its derivatives, 643.
Di-*o*-methoxydeoxybenzoin semicarbazone, 1122.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-2-chloromethylnaphthalene-3-carboxylic acid, and its methyl ester, 1579.
5:6-Dimethoxy-3-(3′:4′-dimethoxyphenyl)hydrindene-2-acetic acid, 641.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-2-hydroxymethylnaphthalene-3-carboxylic acid, lactone, 644.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-3-hydroxymethylnaphthalene-2-carboxylic acid, lactone, 643.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-3-hydroxymethyl-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, α- and β-lactones, 642.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-3-hydroxymethyl-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, 4-hydroxy-, 642.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene, 640.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-2-carboxylic acid, 4-hydroxy-, ethyl ester, 642.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-3-carboxylic acid, and its bromo-derivatives, 640.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-2:3-dicarboxylic acid, and its derivatives, 640.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, and *di*-bromo-, 641.
3:3′-Dimethoxydiphenylene-4:4′-bis-β-aminocrotonic acid, ethyl ester, 1569.
***p*-Dimethoxydiphenylhydrobalata**, 1244.
***p*-Dimethoxydiphenylhydroguttapercha**, 1244.
5:14-Dimethoxyhexahydrochrysene-*b*, 1413.
6:15-Dimethoxyhexahydrochrysene, 1413.
5:6-Dimethoxyhomophthalo-β-piperonylethylamic acid, and its methyl ester, 295.
5:6-Dimethoxyhomophthalo-β-piperonylethylimide, 294.
5:6-Dimethoxyhomophthalo-β-veratrylethylamic acid, and its methyl ester, 295.
5:6-Dimethoxyhomophthalo-β-veratrylethylimide, 295.
Di-*o*-methoxyhydrobenzoin anhydride, 1122.
Di-*m*-methoxyhydrobenzoin αα′-dimethyl ether, 1537.
11:12-Dimethoxy-2:3-methylenedioxyoxyprotoberberine, 295.
2:6-Dimethoxy-7-methylpurine, 957.
3:11-Dimethoxyprotoberberine, synthesis of, 293.
Dimethoxyperylene-3:4:9:10-tetracarboxylic acid, α- and β-di-imides, 499.
Dimethoxyphenanthrenes, and their picrates, 1542.
Dimethoxyphenanthrene-9-carboxylic acids, 1541.
4:5-Dimethoxyphenoxyacetic acid-2-(2:4′-*O*-dimethyl)-phloracetophenone, 684.
4:5-Dimethoxyphenoxyacetic acid-2-phloracetophenone, 683.
Di-*o*-methoxyphenylacetaldehyde semicarbazone, 1122.
βγ-Di-3-methoxyphenyladipic-α acid, and its methyl ester, 1413.
6:7-Dimethoxy-2-phenyl-3:4-dihydronaphthyl-1-acetic acid, ethyl ester, 1416.
4-(3′:4′-Dimethoxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylic acid, and its nitro-derivatives, ethyl esters, 818.
***cis*-αβ-Di-*o*-methoxyphenylethylene oxide**, 1121.
5:7-Dimethoxy-4-phenylflavylium picrate, 6-hydroxy-, 946.
Di-*o*-methoxyphenylhydroxyethylamines, and their derivatives, 1120.
***dl-iso*Di-*o*-methoxyphenylhydroxyethyltrimethylammonium iodide**, 1121.
β-3:4-Dimethoxyphenylpropionic acid, methyl ester, 1414.
2:6-Dimethoxypyrimidine, 4-chloro-, rearrangement of, 956.
***d*-Dimethoxysuccinic acid**, derivatives of, rotatory dispersion of, 1661.
ββ-Dimethylacrylic acid, α-amino-, benzoyl derivative, 535.
Dimethylallylarsine, and its mercurichlorides, 398.
Dimethylallylarsonium picrate, hydroxy-, 399.
4(5)-β-Dimethylaminoethylglyoxaline, salts, 491.
4-Dimethylaminomethylbenzophenones, and their derivatives, 895.
2′-Dimethylamino-5′-methyldiphenyl sulphide, 2-nitro-, 185.
4-*p*-Dimethylaminophenyl-2:3-indeno(3′:2′)-chromylium chloride hydrochloride, 7-hydroxy-, 944.
α- and β-Di(methylamino)platinic salts, 1213.
α- and β-Di(methylamino)platinous salts, 1213.
Dimethylaniline, dielectric constant and density of, 776.
1:4-Dimethylanthranylpropionic acid, 1103.
2:3-Dimethylanthronylidenedipropionic acid, 1103.
1:4-Dimethylanthronylpropionic acid, 1103.
6-(2′:4′-Dimethyl)benzoyl-1:2:3:4-tetrahydronaphthalene, 80.
2:4-Dimethylbenzyl bromide, 1844.
Dimethyl-*des*-hrucidine, 1690.
1:3-Dimethyl-5-*tert*.-butylbenzene, dipole moment of, 480.
2:11-Dimethylchrysene, 1414.
2:7-Dimethyldecalin, 81.
Dimethyldi-*n*-amyl-lead, 42.
Dimethyldi-*n*-butyl-lead, 42.
2:5-Dimethyl-1:2-dihydrobenzthiazole, 1-nitrosoimino-, 1758.
***N*(a)*N*(b)-Dimethyldihydrobrucidinium *di*carbonate**, 1687.
***NN*-Dimethyl-9:10-dihydrophenazine**, 740.
Dimethyldihydroresorcinol, Clemmensen reduction of, 1063.
3:3′-Dimethyldiphenylene-4:4′-bis-β-aminocrotonic acid, ethyl ester, 1569.
***s*-Dimethylethylenediamine**, and its picrate, 1425.
4:3′-Dimethyl-7:6-furocoumarin, 815.
3:6-Dimethyl glucose, 175.
ββ-Dimethylglutarimide, αα′-*di*cyano-, electrolytic reduction of, 539.
βε-Dimethylhexane, β-nitroso-, photochemical decomposition of, 1679.
ββ-Dimethyl*cyclo*hexanone, isolation of second form of, 1063.
1:7-Dimethylhypoxanthine, 2-chloro-, methiodide, 957.
2:3-Dimethylindenone, and their derivatives, 1161.
***d*-4:6-Dimethyl mannonamide**, rotatory dispersion of, 1662.
4:6-Dimethylmannonic acid, derivatives of, 1016.
4:6-Dimethyl δ-mannonolactone and its 2:3-acetone compound, 1016.

4:6-Dimethyl α-mannopyranose 2:3-acetone, 1015.
4:6-Dimethyl mannose, and its acetone compound, 1015.
3:6-Dimethyl β-methylglucoside, and its derivatives, 176.
4:6-Dimethyl α-methylmannopyranoside, and its acetone compound, 1015.
2:5-Dimethyl-1-β-(4-methyl-1-naphthyl)ethylcyclopentan-1-ol, 444.
2:7-Dimethylnaphthacene, 77.
2:7-Dimethylnaphthacene-9:10-quinone, 80.
3:6-Dimethyl-2-naphthoic acid, and its derivatives, 79.
3:6-Dimethyl-2-naphthylamine, and its hydrochloride, 79.
αδ-Di-(4-methyl-1-naphthyl)butane, 444.
3:7-Dimethyl-[0:3:4-*bicyclo*]nonan-2-one-3:4-dicarboxylic acid, ethyl ester, 479.
2:2-Dimethylcyclopentan-1-one-4-carboxylic acid, and its ethyl ester, 1128.
2:2-Dimethylcyclopentan-1-one-4:5-dicarboxylic acid, ethyl ester, 1128.
2:2-Dimethylcyclopentanone-5-glyoxylic acid, and its ethyl ester, 454.
1:9-Dimethyl-1:2-*cyclo*pentano-1:2:3:4-tetrahydrophenanthrene, 444.
3':9-Dimethyl-1:2-*cyclo*pentenophenanthrene, 443.
1:3-Di-(α-methyl-Δ$^{\beta}$-pentenyl)-7-methylxanthine, 1366.
2:10-Dimethylphenoxarsine, 1052.
αα-Dimethylphthalide-4-carboxylic acid. See Cannabinolactonic acid.
Dimethyl-*n*-propylarsine mercurichlorides, and hydroxy-, picrate, 397.
2:4-Dimethylpyridine-3:5-dicarboxylic acid, 6-hydroxy-, amide, 539.
Dimethylpyruvic acid, and its derivatives, 535.
Dimethylsulphonium 9-[2-nitrofluorenylidide], 1610.
Dimethylsulphonium 9-[2:7-*di*nitrofluorenylidide], 1611.
2:6- and **2:7-Dimethyl-1:2:3:4-tetrahydronaphthacenes,** 82.
2:6-Dimethyl-1:2:3:4-tetrahydronaphthalene, 81.
2:7-Dimethyl-1:2:3:4-tetrahydronaphthalene, 81.
2:6- and **2:7-Dimethyl-1:2:3:4-tetrahydronaphthalenesulphonamides,** 81.
2:6- and **2:7-Dimethyl-1:2:3:4-tetrahydronaphthoic acids,** 81.
2:6- and **2:7-Dimethyl-1:2:3:4-tetrahydronaphthols,** 81.
***NN'*-Dimethyl-2:3:9:10-tetrahydrophenazine,** 740.
1:3-Dimethyluracil, 4-chloro-, 956.
ββ-Dimethylvaleric acid, δ-amino-α*γ*-*di*cyano-, lactam, 539.
Di-β-naphthoylphthalide, 1369.
Dinaphthyl *di*sulphide, 3:3'-*di*nitro-4:4'-*di*hydroxy-, 673.
Dinaphthylhydrobalata, α-*di*hydroxy-, and its *p*-nitrobenzoate, 1244.
Dioxan, association of water and deuterium oxide in solutions of, 822.
molecular compounds of, with halogenomethanes, 1720.
Dioxindoles, and *N*-hydroxy-, optically active, 109.
1:2:3:4-Di*cyclo*pentenoanthracene, 1107.
1:2:3:4-Di*cyclo*pentenoanthraquinone, 1107.
s-Di*cyclo*pentenylacetone, and its semicarbazone, 983.
s-Di*cyclo*pentylacetone, and its semicarbazone, 983.
s-Di-β-*cyclo*pentylethyl ketone, and its semicarbazone, 984.
αδ-Diphenetoylbutane, 1093.
αγ-Diphenetoylpropane, 856.
aζ-Di-*p*-phenetylhexane, 1093.
δδ-Di-*p*-phenetrylvalerolactone, 856.
Diphenic acid, 4:6:4':6'-*tetra*nitro-, methyl ester, complex compound of, with indene, 581.
Diphenyl, 3-iodo-2- and -4-amino-, toluenesulphonyl derivatives, 1596.
Diphenyl ethers, *o*-amino-, **rearrangement of,** 196, 1309, 1312.
5-bromo-2':4'-*di*nitro-2-hydroxy-, 5-chloro-2':4'-*di*nitro-2-hydroxy-, 5-iodo-2':4'-*di*nitro-2-hydroxy-, and 2':4'-*di*nitro-2-hydroxy-, derivatives of, 1311.
4-bromo-2':4'-*di*nitro-2-hydroxy-, 4-chloro-2':4'-*di*nitro-2-amino-, 4-iodo-2':4'-*di*nitro-2-amino-, and 2':4'-*di*nitro-2- and -4-*mono*- and -2:4-*di*amino-, 198.
sulphide, 2:4'-*di*nitro-, and 2:4- and 2:4'-*di*nitro-2'-amino-, and their acetyl derivatives, 185.
2-nitro-2'-amino-, derivatives of, 184.
2-*mono*- and 2:4-*di*-nitro-2'-amino-, derivatives of, 341.
sulphoxide, 2-nitro-2'-amino-, picryl derivative, 186.
2:6-Diphenyl-4-(2'-acetoxy-4'- and -5'-methoxyphenyl)pyrylium ferrichlorides, 88.
2:6-Diphenyl-4-(*o*-acetoxyphenyl)pyrylium ferrichloride, 88.
Diphenyl-4'-aldehydes, 2- and 4-nitro-, 114.
Diphenylamine, 5-bromo-, 5-chloro-, and 5-iodo-2':4'-*di*nitro-2-hydroxy-, 2':4'-*di*nitro-5-amino-2-hydroxy-, and 4:2':4'-*tri*nitro-2-amino-, 198.
5-bromo-2':4'-*di*nitro-2-hydroxy-, 5-chloro-2':4'-*di*nitro-2-hydroxy-, 5-iodo-2':4'-*di*nitro-2-hydroxy-, and 2':4'-*di*nitro-2-hydroxy-, derivatives of, 1311.
2:3'-*di*nitro-, 187.
o-thiol-, derivatives of, 1264.
Diphenyl-4'-β-aminocrotonic acid, 4-amino-, acetyl derivative, ethyl ester, 1570.
Diphenyl*iso*benzfuran, action of maleic anhydride on, 1326.
2:3-Diphenylbenzo-2-pyranol, 1164.
1:2-Diphenylbensthiazoline *S*-*di*oxide, 5-nitro-1-*p*-hydroxy-, 1265.
Diphenylcarbamides, fluoro-, 1822.
Diphenyldiethylsilicane, and *di*-*m*-amino-, and its diacetyl derivative, and *di*-*m*-nitro-, 1090.
2:6-Diphenyl-4-(2':4'-dimethoxyphenyl)pyrylium ferrichloride, 87.
Diphenylene-4:4'-bis-β-aminocrotonic acid, ethyl ester, 1570.
Diphenylene oxide series, 1131.
s-Diphenylethane (*dibenzyl*), oxidation of, with selenium dioxide, 903.
4-(ββ-Diphenylethyl)flavene, 4-β-hydroxy-, 1120.
2:3-Diphenyl-5-ethylpyrimidazine, 7-chloro-, 1284.
αγ-Diphenylglycerol, and its triacetate, 84.
Diphenylhydrobalata, *p*-*di*hydroxy-, and *tetra*hydroxy-, and their derivatives, 1243.
***dl-iso*Diphenylhydroxyethylamine,** *di*-*o*-chloro-, and its derivatives, 1123.
Diphenylhydroxyethylamines, optically active, 1120, 1269.
Diphenyliodonium *peri*odate, 1674.
iodide, interchange of iodine atoms in, 1295.
kinetics of decomposition of, 596.
Diphenyliodyl acetate and carbonate, 1676.
Diphenylmethane, 5-bromo-3-nitro-4-amino-, 3-nitro-4-amino-, and its acetyl derivative, and 3:5-*di*nitro-4-amino-, acetyl derivative, 1875.
αα-Diphenyl-β-methyl-*n*-amyl alcohol, 1218.
2-Diphenylmethylol-6-phenyl-1:2:3:6-tetrahydrobenzolactone, 1370.
αα-Diphenyl-β-methylpentane, 1219.
3:5-Diphenyl-1:2:4-oxadiazole, 3:5-*di*-*p*-bromo-, 5.
Diphenylphthalide, *tetra*chloro-*di*-4-bromo-, 1369.
Diphenylsuccinic acid, butyl and di-*n*-butyl esters, 158.
Diphenylsuccinic anhydrides, action of, with aniline and butyl alcohol, 157.

Diphenylsulphone, 4′-bromo-2:4:3′-*tri*nitro-, 2′:5′-*di*chloro-2:4-*di*nitro-, 4′-chloro-2:4:3-*tri*nitro-, and 2:4:3′-*tri*nitro-, 538.
4-chloro-2-nitro-2′-amino-, acetyl derivative, and 2-nitro-2′-amino-, and its derivatives, and 2:4′-*di*nitro-2′-amino-, acetyl derivative, 185.
2-nitro-2′-amino-, 2′-benzoyl derivatives, 342.
Diphenylsulphones, 2:4-*di*nitro-, 537.
2:1-Diphenylthiazolinium iodide, 2-*o*-nitro-, 1264.
2:2′-Diphenylthiocarbocyanine iodide, *di*-*o*-nitro-, 1264.
1:3-Diphenyl-4:5-thionaphthenopyrazole, 473.
2:6-Diphenylthiopyran-4-one, dipole moment of, 602.
2:6-Diphenylthiopyrone, and its dioxide, dipole moments of, 602.
Diphenyl triketone, catalytic hydrogenation of, 83.
S-**Diphenylyl-2-oxy***tri***chloromethylthiol,** 681.
Dipole moments and molecular structure, 987, 989.
and structure of organic compounds, 855.
quantitative relationships between energy of activation and, 1174.
of associated liquids, 502.
of vapours, 971.
Dipolymethylenoanthracenes, derivatives of, 1104.
2:6-Dipropoxy-7-methylpurine, 1367.
Di*iso*propyl sulphide picrate, 241.
Di-*n*-propyl*di*cyanodigold, 1030.
Di-*n*-propylcyanogold, 1029.
Di-*n*-propyldi-*n*-amyl-lead, 42.
Di-*n*-propyldi-*n*-butyl-lead, 42.
Di-*n*-propyl ketone, photochemical decomposition of, 1504.
Di-*n*-propyl-lead *di*nitrate dihydrate, 43.
2:5-Dipropylpropiophenone, 307.
NN-**Di-*n*-propyl***di***thiocarbamic acid,** nickel complex salt, 624.
Di-*n*-propyltin *di*bromide, 41.
N-**Di(quinolyl-8-methyl)-*p*-aminoacetanilide,** 1145.
Di(quinolyl-8-methyl)ethylamine, and its hydrobromide, 1144.
Disalicylaldoxime, copper salt, 733.
Disalicyldoximenickel, 460.
Disalicylaldoximepalladium, 461, 462.
Disalicylaldoximeplatinum, 461.
Disalicylaldoximinoplatinous chloride, 461.
Dispersion, rotatory, of carbohydrates and their derivatives, 295.
of organic compounds, 696, 704, 709, 1313.
Dissociation constants of amines, 796.
and constitution of monocarboxylic acids, 343, 346.
of organic acids, 21, 912, 1624.
Disulphoxides, charcoal as catalyst of stereoisomeric change in, 974.
Dithionic acid. See under Sulphur.
Dodecahydro-1:2-benzanthracene, 769.
Dodecahydro-1:2-benzanthryl-5-acetic acid, 769.
Dodecahydrocholanthrene, 769.
Dodecahydro-1:2:3:4-dibenzanthraquinone, 1107.
Dodecahydro-1:2:3:4-dibenzanthraquinone, 5:8-*di*hydroxy-, diacetyl derivative, 1107.
Dodecahydro-5:6:7:8-dibenz-1:4-naphthaquinone, 1106.
Dodecahydrophenanthrene-9:10-dicarboxylic anhydride, 1106.
Drosera Whittakeri, colouring matters of, 325, 334, 336.
Droserone, 326.
boroacetate, 335.
Droserone, hydroxy-, 326.
synthesis of, and its triacetyl derivative, 336.
pyridine salt, 336.
boroacetate, 335.
Drude equation, calculation of constants of, 297.

E

Eicositetrahydrotetrabenzanthraquinone, 1106.
Electro-endosmosis, 1229.
"bubble-tube" measurement of, 527.
Elements, rare, 554.
tervalent, complex-anion formation by, 1008.
10:11-Epoxyundecoic acid, addition of hydrogen bromide to, 1572.
Equilenin, structure of, 445.
methyl ether, derivatives of, 450.
Equilin, structure of, 445.
methyl ether, and its derivatives, 451.
*neo***Ergostatetraene,** 467.
*neo***Ergostatriol,** 467.
*neo***Ergosterol,** hydrocarbons from, 465.
Eserine, synthesis of, 755.
l-**Eseroline** picrate and methopicrate, 758.
Esterification, polar and non-polar effects in, 1588.
of carboxylic acids, 587.
Ethane, equilibrium of formation of, from ethylene, 876.
vibration frequency of, 885.
Ethane, bromo-derivatives, kinetics of action of sodium hydroxide with, 1514.
Ethers, molecular compounds of, with halogenoethanes and -methanes, 1709.
Ethoxides, conductivity of, 540.
4-Ethoxyacetophenone, 2-hydroxy-4-β-hydroxy-, and its derivatives, 1098.
m-**Ethoxyanisole,** *m*-β-hydroxy-, and its derivatives, 1099.
γ-**4-Ethoxybenzoylbutyric acid,** γ-3-amino-, and γ-3-nitro-, 1093.
β-**4-Ethoxybenzoylpropionic acid,** β-3-amino-, and β-3-nitro-, 1093.
δ-**4-Ethoxybenzoylvaleric acid,** δ-3-amino- and δ-3-nitro-, 1093.
1-Ethoxybenzthiazole, 5-chloro-, and 5-iodo-, 1760.
5-Ethoxybenzthiazole, 1-hydroxy-, 1760.
4-Ethoxychalkone, 5-bromo-2-hydroxy-4-β-hydroxy-, 2-hydroxy-4-β-hydroxy-, 2:2′-*di*hydroxy-4-β-hydroxy-, and 2′-nitro-2-hydroxy-4-β-hydroxy-, and their acetyl derivatives, 1100.
4-Ethoxyethylbenzene, 2-hydroxy-4-β-hydroxy-, 1099.
β-**Ethoxyethyltrimethylammonium** iodide, 723.
7-Ethoxyflavanone, 7-β-hydroxy-, 1100.
7-Ethoxyflavone, 6-bromo-7-β-bromo-, 6-bromo-7-β-hydroxy-, and 7-β-hydroxy-, and its acetyl derivative, 1100.
4′-β-Ethoxyflavylium hydroxide, 2′-hydroxy-4′-β-hydroxy-, and its salts, 1101.
4-Ethoxy-4′-methoxychalkone, 2-hydroxy-4-β-hydroxy-, and its derivatives, 1100.
1-Ethoxy-5-methylbenzthiazole, 1758.
1-Ethoxy-5-methylbenzthiazole, 4(or 6)-bromo-, 1759.
2-Ethoxy-2-methylchroman, 647.
d-(+)-β-**Ethoxy-β-phenylpropionic acid,** ethyl ester, 1665.
Ethyl, free, reactions of, 366.
Ethyl carbonate, α-cyano-, 1059.
(−)**Ethyl** β-butyl ether, 1079.
β-octyl sulphide, 1081.
1-Ethylacenaphthene, and its picrate, 670.
2-Ethylacetophenone, 4-hydroxy-, and its derivatives, 302.
p-**Ethylacetophenone** semicarbazone, 1873.
Ethylamine, photochemical decomposition of, 1612.
4(5)-β-Ethylaminoethylglyoxaline, salts, 491.
p-**Ethylbenzyl** bromide, 1843.
Ethylene, vibration frequency of, 885.
equilibrium of hydrogenation of, to ethane, 876.
reactions of, with deuterium and with hydrogen at nickel surfaces, 1701.

Ethylene derivatives, influence of substituents on additive reactivity of, 984, 1396.
addition of bromine to, 1396.
Ethylene glycol, esterification of higher fatty acids with, 1774.
Ethylene*di*aminodiethylgold aurocyanide, 1029.
Ethylene*di*aminodi-*n*-propyl*di*bromodigold, 222.
Ethylene*di*aminodi-*n*-propylgold aurocyanide, 1029.
Ethylene*di*aminotetraethyl*di*cyanodigold, 1029.
Ethylene*di*aminotetra-*n*-propyl*di*bromodigold, 222.
Ethylene*di*aminotetra-*n*-propyl*di*cyanodigold, 1029.
Ethylenic compounds, addition of hydrogen bromide to, 1572.
with non-terminal double bonds, addition of hydrogen bromide to, 1108.
α-Ethylglucofuranoside, crystal structure of, 1504.
4(5)-Ethylglyoxaline, 4(5)-β-chloro-, hydrochloride, and 4(5)-β-hydroxy-, and its picrate, 490.
5-Ethylnerolin, and its picrate, 454.
***m*-Ethylphenol**, and its derivatives, 302.
10-Ethylphenoxarsine-2-carboxylic acid, optical resolution of, 1268.
6-Ethylpyrimidine, 4:5-*di*amino-, 2-chloro-4:5-*di*amino-, 2-chloro-5-nitro-4-amino-, and 2:4-*di*chloro-5-nitro-, 1284.
4(5)-Ethyl-2-thiolglyoxaline, 4(5)-β-hydroxy-, 490.
6-Ethyl-2-thiouracil, 1283.
***p*-Ethyltoluene**, dipole moment of, 480.
Ethyltri-*n*-butyltin, 41.
6-Ethyluracil, 5-nitro-, 1284.
Eutropic series, mixed melting points in, 1480.
Explosions, correlation of ionisation and radiation in, 165.
flame movement and ionisation current during, 160.

F.

Ferrous chloride. See under Iron.
Flavanones, and their oxidation, 866.
Flavylium salts, 86.
structure of, 1161.
Fluorene, absorption spectrum of, 516.
and bromo-, nitration of, 1607.
condensed derivatives of, 1319.
Fluorene, bromonitro-derivatives, 1608.
Fluorenyl-9-dimethylselenonium salts, 1611.
Fluorenyl-9-dimethylsulphonium salts, 2-nitro-, 1610.
2:7-*di*nitro-, 1611.
Formaldehyde, vapour pressure of, 506.
liquid, preparation of, 338.
Formic acid, chloro-, *d*-β-butyl ester, 1079.
Friedel–Crafts reaction in the carbazole series, 741.
Fructose, rotatory dispersion of open-chain derivatives of, 696.
α- and β-**Fructoses**, diacetone compounds of, 1019.
Fucose, rotatory dispersion of open-chain derivatives of, 696.
α-**l-Fucose**, crystal structure of, 981.
Fucostenones, and their 2:4-dinitrophenylhydrazones, 1207.
Fucosterol, partial reduction of, 1205.
Fumaric acid, ethyl ester, condensation of, with ethyl benzylmalonate, 420.

G.

Galactose, conversion of glucose into, 685.
α-*d*-**Galactose**, crystal structure of, 980.
Gallic acid, *n*-propyl and *n*-butyl esters, 1220.
Gallium from Northumberland coal ash, 566.
Gases, relation between molecular orientation polarisation of, and in dissolved and liquid states, 1747.
Gases, heat of adsorption of, on zinc oxide and mixtures of zinc and chromium oxides, 1487.
ignition of, 1426.
Germanitungstic acid, structure of, 580.
Germanium from Northumberland coal ash, 566.
Glucose, conversion of, into galactose and gulose, 685.
derivatives, conversion of, into altrose derivatives, 1193.
reaction of dichloroacetyl groups in, 1180.
phenylosazone, methylation of, 1398.
Glucosides, digitalis. See under Digitalis.
Glutaric acid, dissociation constant of, 28.
Glutaryl chloride, structure of, 856.
Glycerol, esterification of higher fatty acids with, 1774.
Glycosides, crystalline structure of, 978.
Glyoxylic acid, α-amino-, and α-bromo-, ethyl esters, bromonitro- and nitro-tolylhydrazones, 118.
α-amino-, α-bromo-, and α-chloro-, ethyl esters, halogenophenylhydrazones of, 1008.
Gold :—
Tribromogold, 217.
Gold organic compounds, 219, 1024.
Gorse. See *Ulex europaeus*.
Graphite, determination of, 1723.
Grignard reaction with phthalic anhydrides, 1367.
with succinic anhydrides, 1370.
Guaiacum resin, constituents of, 120.
dl- and *l*-**Guaiaretic acids**, diethyl ethers, 122.
Gulose, conversion of glucose into, 685.
Gutta-percha hydrochloride, action of zinc dust and alcohol on, 1239.
α- and β-**Gutta-percha**, 1241.

H.

Halogens, polar effects of, in aromatic compounds, 1827.
addition of, to unsaturated acids and their esters, 1600.
Halogen compounds, reactivity of, 1410, 1411.
Heat of adsorption of gases on zinc oxide and on its mixtures with chromium oxide, 1487.
Helium, reaction products of free methyl in, 372.
tert.-**Heptyl** iodide, 1282.
tert.-**Heptylaniline**, and its salts, 1282.
tert.-**Heptylbenzene**, *p*-amino-, and its hydrochloride, 1281.
p-n-**Heptyloxybenzoic acid**, 1874.
Heterocyclic compounds, configuration of, 1051, 1268.
unsaturation and tautomeric mobility of, 1755, 1762.
Heteropoly-acids, and their salts, *X*-ray structure of, 575.
Hexadecahydro-5:6:7:8-di*cyclo*penteno-1:2:3:4-dibenzanthraquinone, 1106.
Hexadeuterobenzene, experiments on, 851.
cyclo-**Hexa-1:4-dione**, dipole moment of, 1696.
Hexahydrocholanthrenecarboxylic acid, and its ethyl ester, 670.
Hexahydrochrysenes, absorption spectra of, 515.
Hexahydroterephthalic acids, configuration of, 1373.
cyclo-**Hexanecarboxylic acids**, *trans*-2-bromo-, and *cis*-3-bromo-, and their ethyl esters, 263.
cyclo-**Hexane-1-cyanoacetic-2-β-propionic acid**, dimethyl ester, 1067.
d- and *l*-*trans*-*cyclo*-**Hexane-1:2-diacetic acids**, and their derivatives, 1070.
cyclo-**Hexane-1:1-dicarboxylic acid**, and its sodium salt, dissociation constants of, 1628.
1:2-*cyclo*-Hexanediols, and their derivatives, 1269.
cyclo-**Hexane-1:1:2:4:4:5-hexacarboxylic acid**, methyl ester, 192.

*cyclo*Hexane-1:2:4:5-tetracarboxylic acid, and its methyl ester, 192.
*cyclo*Hexanol, 2-amino-, 1272.
1:2-*cyclo*Hexanolone, and its derivatives, 1273.
dl-*cyclo*Hexan-1-ol-2-trimethylammonium iodide, 1273.
*cyclo*Hexanone, oximino-, nitrite, 1273.
*cyclo*Hexanonetricarboxylic acid, methyl ester, 194.
*cyclo*Hexenones, substituted, synthesis of, 1285.
γ-Δ^1-*cyclo*Hexenylbutyric acid, and its *p*-phenylphenacyl ester, 1638.
β-Δ^1-*cyclo*Hexenylethyl alcohol, and its derivatives, 501.
β-Δ^1-*cyclo*Hexenylethyl*cyclo*hexanol, 501.
β-(Δ^1-*cyclo*Hexenylethyl)malonic acid, 1637.
tert.-Hexylaniline, and its picrate, 1281.
tert.-Hexylbenzene, *p*-amino-, and its salts, 1281.
*cyclo*Hexylidene-1-cyanoacetic-2-β-propionic acid, dimethyl ester, 1067.
p-*n*-Hexyloxybenzoic acid, 1874.
Hofmann degradation, Wagner rearrangement in, 722.
Holarrhena antidysenterica, alkaloid from bark of, 734.
resinols of latex of, 1129.
Homoapofenchocamphoric acid, synthesis of, 1127.
Homonaphthalic acid, 319.
Homopiperonylic acid, 6-bromo-, and its derivatives, 667.
Hormones, œstrogenic, synthesis of compounds related to, 429, 445, 1633.
l-trans-Hydrindane, 1071.
d- and *l-trans*-β-Hydrindanones, 1070.
Hydrindeneacetic acids, hydroxy-, α-substituted, inversion of, 15.
β-1-Hydrindyl-α-naphthoic acid, 771.
*iso*Hydrobenzoins, optically active, 1120, 1269.
Hydrobromic acid. See under Bromine.
Hydrocarbons, aromatic, complex formation of, with polynitro-compounds, 580, 1856.
m-alkylation of, by the Friedel–Crafts reaction, 303.
polycyclic, 1319.
absorption spectra of, 509, 512.
related to sterols, structure of, 93.
Hydrocarbons, *poly*nitro-, compounds of, with 1-keto-1:2:3:4-tetrahydrocarbazole, 976.
Hydrochloric acid. See under Chlorine.
Hydrocyanic acid. See under Cyanogen.
Hydrogen, dissociation pressure of combination of, with palladium, 1254.
catalytic combustion of, 32.
catalytic effect of, on carbon monoxide flames, 144.
reaction of, with ethylene at nickel surfaces, 1701.
kinetics of reaction of, with sulphur, 58, 351.
reaction products of free methyl in, 372.
Hydrogen *per*oxide, reaction of, with cerous hydroxide, 362.
action of, with pyrogallol, specificity of catalytic iron for, 826.
Hydrogenation by means of selenium, 1391.
Hydrolysis of carboxylic esters, 1482.
Hydroxides, electrometric precipitation of, 796.
Hydroxy-acids, tertiary, resolution of, 153.
Hydroxypentamminorhodium salts. See under Rhodium.
o-Hydroxysulphones, rearrangement of, 1234.

I.

Ignition of gases, 1426.
Imido-chlorides, 894.
Iminoformylcarbylamine, reactions of, 674.
Indene nucleus, formation of, 1020.
complex compound of, with methyl 4:6:4′:6′-tetranitrodiphenate, 581.
Indene, 1-hydroxy-, cyclic system from, 1156.
Indole group, optical activity in, 104.
Indole series, 1208.
Insects, chemistry of, 391.
Iodine, at. wt. of, 793.
Iodine oxides and sulphates, 1258.
Periodic acid, reaction of, with α-ketols, α-diketones, and α-ketonealdehydes, 1467.
Iodoxy-group, and its relations, 1669.
Iron, catalytic, specificity of, in reaction between hydrogen peroxide and pyrogallol, 826.
Iron compounds, complex, 906.
Ferrous chloride, formation and solution of, in non-aqueous liquids, 906.
complex compounds of, 908.
Isatin derivatives, absorption spectra and constitution of, 1653.

K.

Keten, Friedel–Crafts reaction with, 1873.
dimeric, constitution of, 1751.
4-Keto-1-acetoxy-3-(nitrophenyl)-3:4-dihydrophthalazines, 1811.
Keto-acid, $C_7H_{10}O_5$, and its derivatives, from oxidation of dehydronorcaryophyllenic acid, 533.
1-Keto-3-(2′-aminophenyl)-4-methyltetrahydrophthalazine, 1808.
1-Keto-3-(2′-aminophenyl)-2-methyltetrahydrophthalazine-4-acetic acid, and its lactam, 1804.
8:11-Ketobenzanthrone, 575.
β-Keto-$\alpha\delta$-bis-(3-methoxy-4-ethoxyphenyl)-γ-methylvaleramide, 121.
1-Keto-3-(2′-bromo-4′-aminophenyl)-4-methyltetrahydrophthalazine, 1137.
1-Keto-3-(2′-bromo-4′-nitrophenyl)-2-methyltetrahydrophthalazine-4-acetic acid, and its methyl ester, 1136.
3-Keto-1:2-*endo*-4′:6′-*di*bromo-*m*-tolylimino-1:2-dihydro-1:2-benz*iso*diazole 1-oxide, 1621.
1-Keto-2-(*trans*-2′-carbomethoxy*cyclo*pentyl)-1:2:3:4-tetrahydronaphthalene, 1539.
1-Keto-2-(*cis*- and *trans*-2′-carboxy*cyclo*pentyl)-1:2:3:4-tetrahydronaphthalenes, 1539.
1-Keto-3-(4′-chloro-2′-aminophenyl)-4-methyltetrahydrophthalazine, 1808.
1-Keto-3-(4′-chloro-2′-aminophenyl)-2-methyltetrahydrophthalazine-4-acetic acid, and its lactam, 1804.
1-Keto-3-(chloro-2′-nitrophenyl)-2-methyltetrahydrophthalazine-4-acetic acids, and their methyl esters, 1804.
5-Ketodecahydro-1:2-benzanthracene, 768.
4-Keto-6:7-dimethoxy-1-(6′-bromo-3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, 3-bromo-, ethyl ester, 642.
1-Keto-5:6-dimethoxy-3-(3′:4′-dimethoxyphenyl)-indene-2-acetic acid, 641.
4-Keto-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, and its derivatives, 641.
1-Keto-6:7-dimethoxy-2-phenyltetrahydronaphthalene, 1416.
1-Keto-2:5-dimethyl-1:2-dihydrobenzthiazole, and its bromo-derivatives, 1758.
γ-Keto-$\alpha\gamma$-diphenylpropane, $\alpha\beta$-*di*hydroxy-, 85.
Ketododecahydrocholanthrene, 769.
9-Keto-$\Delta^{10:11}$-dodecahydrophenanthrene, 1286.
1-Keto-5-ethoxy-2-methyl-1:2-dihydrobenzthiazole, 1760.
4-Keto-1-ethoxy-3-phenyl-3:4-dihydrophthalazine, 1815.
Ketohydrophenanthrene derivatives, synthesis of, 1288.

4Keto-1-hydroxy-3-(nitroaryl)-3:4-dihydrophthalazines, preparation of, 1808.
β-Keto-δ-hydroxy-θ-(2:2:6-trimethyl-Δ^5-*cyclo*hexenyl)-ζ-methyl-$\Delta^{\epsilon\eta}$-octadiene, and its phenylsemicarbazone, 586.
α-Ketols, electrolytic dissociation of, 226.
steric hindrance in oxidation and racemisation of, 223.
action of, with periodic acid, 1467.
4-Keto-1-methoxy-3-(2′-bromo-4′-nitrophenyl)-3:4-dihydrophthalazine, 1813.
4-Keto-1-methoxy-3-(2′:6′-*di*chloro-4′-nitrophenyl)-3:4-dihydrophthalazine, 1814.
4-Keto-1-methoxy-3-(2′-chloro-4′-nitrophenyl)tetrahydrophthalazine, 1813.
2-Keto-10-methoxy-2:3:4:5:6:7:8:14:15:16-decahydrochrysene, 1287.
3-Keto-7-methoxy-1:2:3:9:10:11-hexahydro-1:2-*cyclo*pentenophenanthrene, 1288.
1-Keto-7-methoxy-1:2:3:4:9:10-hexahydrophenanthrene, and its derivatives, 1291.
4-Keto-1-methoxy-3-(nitrophenyl)-3:4-dihydrophthalazines, 1811.
4-Keto-1-methoxy-3-phenyl-3:4-dihydrophthalazine, 1815.
5-Keto-8-*m*-methoxyphenyloctoic acid, 1290.
1-Keto-6-methoxy-1:2:3:4-tetrahydronaphthalene, 1287.
1-Keto-6-methyldecalin-4-carboxylic acid, and its derivatives, 478.
1-Keto-2-methyl-1:2-dihydrobenzselenazole, 1765.
1-Keto-2-methyl-1:2-dihydrobenzthiazole, 5-bromo-, 5-chloro-, 5-iodo-, and 5-nitro-, 1760.
3-Keto-6:7-methylenedioxy-2-β-piperonylethyl-1:2:3:4-tetrahydro*iso*quinoline, 665.
3-Keto-2-methyloctahydropyrrocoline, and its picrate, 1744.
α-Keto-ξ-methyl-γ-*iso*propylsuberic acid, and its silver salt and derivatives, 316.
1-Keto-2-methyl-1:2:3:4-tetrahydrophenanthrene, 1635.
Ketones, ultra-violet absorption spectra of, 1313.
aliphatic, photodissociation of, 1151.
dicyclic derivatives of, 982.
aromatic, hydrolysis of, by acids, 1123.
cyclic, photochemical decomposition of, 455.
unsaturated substituted, 1570.
α-Ketonealdehydes, action of, with periodic acid, 1467.
1-Keto-3-(2′-nitrophenyl)-2-methyltetrahydrophthalazine-4-acetic acid, and its methyl ester, 1804.
3-Keto-octahydropyridocoline, and its picrate, 1744.
2-Keto-4-phenyldecalin, 1286.
3-Keto-1-phenyl-11-methyl-2:3:4:9:10:11-hexahydrophenanthrene, 1287.
5-Keto-2-phenyl-4-(2′-nitro-5′-acetoxybenzylidene)-4:5-dihydro-oxazole, 1267.
5-Keto-2-phenyl-4-*o*-nitrobenzylidene-4:5-dihydro-oxazole, 1267.
5-Keto-2-phenyl-4-(2′-nitro-5′-benzyloxybenzylidene)-4:5-dihydro-oxazole, 1266.
5-Keto-2-phenyl-4-(2′-nitro-5′-methoxybenzylidene)-4:5-dihydro-oxazole, 1267.
2-Keto-4-phenyl-$\Delta^{1:9}$-octalin, 1286.
α-Ketopropaldehyde, *ββω-tri*bromo-, 3:5-*di*chloro-2:4-*di*bromophenylhydrazone, 1008.
β-Keto-δ-teresantalylbutylmalonic acid semicarbazone, 313.
γ-Keto-ε-teresantalylhexoic acid, silver salt and methyl ester, and its derivatives, 314.
1-Keto-1:2:3:4-tetrahydrocarbazole, compounds of, with polynitrohydrocarbons, 976.
Ketoxime hydrochlorides, rearrangement of, 1223.
Kinetics of reactions, 1111.
Krypton, density of, 791.

L.

Lamps, mercury arc, light filters for, 76.
Lanthanum nitrates, and their solubilities in water, 824.
magnesium nitrate, solubility of, 356.
Lauric acid, potassium salt, densities of aqueous solutions of, 626.
Lead, at. wt. of, 794.
Lead organic compounds:—
Lead alkyls, physical properties of, 39.
Lectures delivered before the Chemical Society, 48, 201, 268, 654, 1876.
Lettocine, and its derivatives, 734.
Lettoresinols, and their derivatives, 1130.
Leuco-anthocyanidins, 744.
Leuco-anthocyanins, 744.
α- and β-Licanic acids, and their derivatives, 1632.
Lichen acids, 1379.
Light filters for mercury lamps, 76.
Linkings, double, addition to, 828, 1511.
Liquids, polarisation of, 727.
relation between molecular orientation polarisation of, and in gaseous and dissolved states, 1747.
associated, dipole moments of, 502.
non-aqueous, electro-endosmosis with, 1229.
Liversidge Lecture, 268.
Lumistadienetriol, and its derivatives, 1222.
Lumistatetraene, 1223.
Lumisterol, and its 3:5-dinitrobenzoate, 1221.
Lupin alkaloids, 1743.

M.

Maclurin, cyano-, constitution of, and its derivatives, 752.
Magnesium boride, hydrolysis of, 1694.
double nitrates with cerium group metals, solubility of, 356.
Magnus's salt, green and red forms of, 1586.
Maize starch, waxy, molecular structure of, and its derivatives, 177.
Maleic anhydride, addition of, to *cyclo*pentadiene, 1512.
action of, on diphenyl*iso*benzfuran, 1326.
Malic acid, ethyl ester, oxidation of, with selenium dioxide, 902.
Malonic acid, dissociation constant of, 28.
complex metallic salts, 168.
heavy-metal and sodium salts, complex formation between, 1728.
sodioalkyl esters, Michael additions to, 857.
Malonic acid, nitro-, methyl ester, and its nitronic derivative, 7.
Malonic acids, reaction of, with metallic hydroxides, 910.
Mandelic acid, ethyl ester, oxidation of, with selenium dioxide, 903.
γ-Mandelic acid, resolution of, with (−)ephedrine, 1544.
Mandelic acid, *r-o*-amino-, and its derivatives, 107.
(+)- and (−)-*o*-amino-, and their derivatives, 108.
(−)*o*-hydroxy-, 111.
(+)- and (−)-*o*-nitro-, and their derivatives, 108.
Manganese:—
Manganic sulphate, preparation of, and its use as oxidising agent, 1605.
Manganimolybdates, structure of, 579.
***d*-Mannuronic acid**, preparation of, and its derivatives, 517.
Matairesinol, and its diethyl and dimethyl ethers, and *di*bromo-, and *di*nitro-, dimethyl ethers, 635.
Melting points, mixed, in entropic series, 1480.
Memorial Lectures, 654, 1876.

Δ^1-Menthen-2-ol-3-glyoxylic acid, lactone, and its 2:4-dinitrophenylhydrazone, 316.

***dl*-Δ^1-*p*-Menthen-3-one.** See *dl*-Piperitone.

Δ^1-*p*-Menthen-3-one-4-carboxylic acid, methyl ester, 1585.

Menthone, rotatory dispersion of, 709.

Mercury, parachor of, in simple and complex compounds, 1549.

Mercury organic compounds :—
Mercury alkyls, physical properties of, 39.
alkylmercaptides, 1562.

Mesityl*di*chlorophosphine, 463.

Mesityldimethylarsine, 464.

Mesityldimethylethylphosphonium iodide, 464.

Mesityldimethylphosphine, 462.

Mesitylene, *tri*nitro-, dipole moment of, 960.

Metacetaldehyde, preparation of, and its effect on rotation of ethyl tartrate, 904.

Metals, rare, extraction of, from British minerals, 566.

Metallic hydroxides, reaction of malonic acids with, 910.
salts, complex, constitution of, 1549.

Metatungstic acid. See under Tungsten.

Methane, ignition of mixtures of, with air at reduced pressures, 1426.

Methane, nitro-, condensation of, with halogenoaldehydes, 1178.

2-Methanesulphonyldiphenylamine, 4-nitro-, 1265.

Methoxides, conductivity of, 540.

8-Methoxy-7-acetonyloxycoumarin, 816.

4-Methoxy-3-*iso*amylbenzaldehyde, 2-hydroxy-, and its derivatives, 1372.

4-Methoxy-3-*iso*amylbenzoic acid, 2-hydroxy-, 1372.

***r*-4-Methoxybenzilic acid**, 153.

***o*-Methoxybenzoic acid**, 1-acetyl-2-naphthyl ester, 870.
o-acetylphenyl ester, 869.

Methoxy-2-benzoylbenzoic acid, 1369.

γ-4-Methoxybenzoylbutyric acid, γ-3-amino-, and γ-3-nitro-, 1093.

3-4′-Methoxybenzoyl-2-naphthoic acid, 1369.

β-4-Methoxybenzoylpropionic acid, β-3-amino-, 1093.

δ-4-Methoxybenzoylvaleric acid, δ-3-amino-, and δ-3-nitro-, 1093.

1-Methoxybenzthiazole, and 5-bromo-, 1760.

***m*-Methoxybenzyl alcohol**, 1537.

***m*-Methoxybenzylacetone**, and its semicarbazone, 433.

3- and 5-Methoxybenzylideneglycine, 2-hydroxy-, barium salt, 214.

***m*-Methoxybenzylidenephenyl*iso*oxazolone**, 1541.

7-Methoxy-4′-benzyloxyflavanone, 867.

5-Methoxy-α-(*m*-benzyloxyphenyl)cinnamic acid, 2-amino-, and 2-nitro-, 1541.

6′-Methoxychromeno-(3′:4′:2:3)-chromone, 7-hydroxy-, 994.

8′-Methoxychromeno-(3′:4′:2:3)-chromone, 7-hydroxy-, and its acetyl derivative, 996.

***m*-Methoxycinnamic acid**, and its ethyl ester, bromination of, and $\alpha\beta$-*di*iodo-, 1600.

***m*-Methoxycinnamic acid**, 6-nitro-α-amino-, α-benzoyl derivative, 1267.

***m*-Methoxy*allo*cinnamic acid**, and its bromo-derivatives, 1604.

***p*-Methoxycinnamic acid**, 2-acetyl-1-naphthyl ester, 870.

ω-*p*-Methoxycinnamoyl-2-acetyl-1-naphthol, 870.

4-Methoxycinnamylidenepyruvic acid, and its sodium salt and 2:4-dinitrophenylhydrazone, 1053.

2-Methoxy-9-β-diethylaminoethylaminophenanthridine, salts of, 1409.

2-Methoxy-9-δ-diethylamino-α-methylbutylaminophenanthridine, and its salts, 1410.

2-Methoxy-4:5-diethyl-β-chloropropiophenone, 303.

4-Methoxydimethyldeoxybenzoins, and their 2:4-dinitrophenylhydrazones, 1125.

7-Methoxy-3′:3′-dimethyl-1:2-*cyclo*pentenophenanthrene, 450, 453.

7-Methoxy-1:3′-dimethyl-1:2:3:4-tetrahydro-1:2-*cyclo*pentenophenanthrene, 453.

4-Methoxydiphenyl ether, 2′:4′-*di*nitro-2-amino-, 198.

α-Methoxy-$\alpha\alpha$-diphenyl-β-methylpentane, 1218.

1-Methoxy-5-ethoxybenzthiazole, 1760.

3-Methoxy-4-ethoxyphenylacetonitrile, 121.

β-3-Methoxy-4-ethoxyphenyl-α-methylacrylic acid, and its ethyl ester, 121.

β-3-Methoxy-4-ethoxyphenyl-α-methylpropionic acid, 121.

7-Methoxyflavanone, 4′-hydroxy-, 867.

Methoxyflavones, 1165.

Methoxyflavylium salts, 87.

5-Methoxyhomophthalo-β-*m*-methoxyphenylethylamic acid, and its methyl ester, 294.

5-Methoxyhomophthalo-β-*m*-methoxyphenylethylimide, 294.

4′-Methoxy-7-(β-hydroxyethoxy) flavone, and its acetyl derivative, 1101.

Methoxyl, determination of, microvolumetrically, 1419.

4′-Methoxy-4-(*p*-methoxyphenacyl)flavene, 89.

4′-Methoxy-4-(*p*-methoxyphenacyl)flavylium salts, 89.

4′-Methoxy-4-(*p*-methoxyphenacylidene)flavene, 89.

5-Methoxy-α-(*m*-methoxyphenyl)cinnamic acid, 2-amino-, and 2-nitro-, 1541.

1-Methoxy-5-methylbenzthiazole, 1758.

2-Methoxy-2-methylchroman, 648.

4-Methoxy-2-methyldeoxybenzoin, and its semicarbazone, 1125.

4-Methoxy-2-methyldeoxybenzoin, 4′-nitro-, and its oxime, 1126.

Methoxymethyldihydro*neo*brucidine, action of methyl sulphate on, in boiling benzene, 1291.

Methoxymethyl*chano*dihydrostrychnanic acid, and *N*-nitroso-, 935.

Methoxymethyl*chano*dihydrostrychnonic acid, *penta*-bromo-, hydrobromide, 938.

8-Methoxy-3′-methyl-7:6-furocoumarin, 816.

6-Methoxymethylhomopiperonyl-γ-piperonylethylamine, 665.

7-Methoxymethyl-1:2-*cyclo*pentenophenanthrenes, 450, 453.

6-Methoxy-7-methylpurine, 2-chloro-, 957.

6-Methoxy-8-methylquinoline, and 5- and 7-bromo-, and their salts, 1422.

3-Methoxy-1-methylquinolone, 1657.

Methoxymethyltetrahydrobrucidine methosulphate, 1692.

2′-Methoxy-β-naphthaflavone, 870.

1-Methoxynaphthalene-2:4-dicarboxylic acid, and its derivatives, 1062.

Methoxy-2-α-naphthoylbenzoic acid, 1369.

***o*-(6-Methoxy-2-naphthoyl)benzoic acid**, 1369.

β-6-Methoxy-1-naphthylethyl alcohol, and its bromide, 452.

1-(β-6′-Methoxy-1′-naphthylethyl)-2:5-dimethyl-Δ^1-*cyclo*pentene, and its picrate, 453.

2-(β-6′-Methoxy-1′-naphthylethyl)-4- and -5-methyl-*cyclo*pentanone-2-carboxylic acids, ethyl esters, 452.

7-Methoxy-4-phenacylflavylium ferrichloride, 87.

2- and 7-Methoxyphenanthridines, 9-chloro-, 1408.

Methoxyphenanthridones, 1408.

5-Methoxyphenol, 3-chloro-2-nitroso-, and 2-nitroso-, metallic derivatives, 1617.

4-Methoxyphenoxyacetic acid-2-acetonitrile, and its methyl ester, 994.

6-Methoxyphenoxyacetic acid-2-acetonitrile, and its derivatives, 995.

6-Methoxyphenoxyacetic acid-2-chloroacetonitrile, ethyl ester, 995.

6-Methoxyphenoxyacetic acid-2-*O*-dimethylphloracetophenones, 996.
4-Methoxyphenoxyacetic acid-2-resacetophenone, 994.
6-Methoxyphenoxyacetic acid-2-resacetophenone, 995.
***m*-Methoxyphenylacetic acid**, ethyl ester, preparation of, 1537.
3-Methoxy-2-phenylbenzo-2-pyranol, 1165.
4′-Methoxy-2-phenylbenzopyranol 4-ethyl ether, 1164.
4-Methoxyphenyl 4-benzyloxystyryl ketone, 2-hydroxy-, 867.
γ-*m*-Methoxyphenylbutyric acid, and its derivatives, 1290.
6′-Methoxy-4-phenyl-2:3-coumareno(3′:2′)-chromylium chloride, 7-hydroxy-, 943.
5-*o*- and -*p*-Methoxyphenyldihydroresorcinols, 540.
4-(3′-Methoxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylic acid, 4-4′-hydroxy- and -2′-nitro-4′-hydroxy-, ethyl esters, 817.
4-(4′-Methoxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylic acid, 4-3′-hydroxy-, and -5′-nitro-3′-hydroxy-, ethyl esters, 817.
β-*m*-Methoxyphenylethylacetoacetic acid, ethyl ester, 1537.
β-*m*-Methoxyphenylethyl*cyclo*hexane-2:6-dione, 1290.
ζ-*m*-Methoxyphenyl-Δ$^{\alpha\gamma}$-hexadiene, 435.
ζ-*m*-Methoxyphenyl-Δ$^{\alpha}$-hexen-γ-ol, and its 3:5-dinitrobenzoate, 435.
ζ-3-Methoxyphenyl-δ-methyl-Δ$^{\alpha}$-hexen-δ-ol, and its 3:5-dinitrobenzoate, 433.
***m*-Methoxyphenylpropiolic acid**, 1604.
p-*m*-Methoxyphenylpropionic acid, esters, 435.
methyl ester, 1413.
β-3-Methoxyphenylpropionic acid, α**β-*di*bromo-**, and its ethyl ester, and α**β-*di*bromo-β-6-bromo-**, 1603.
γ-*m*-Methoxyphenyl-*n*-propyl alcohol, 1289.
and its 3:5-dinitrobenzoate, 435.
γ-*m*-Methoxyphenyl-*n*-propyl chloride, 435.
γ-*m*-Methoxyphenylpropyl methyl ketone, 1538.
Methoxypurines, rearrangement of, 955.
Methoxypyrimidines, rearrangement of, 955.
2-Methoxyquinoline, 3-hydroxy-, 1657.
3-Methoxyquinolone, preparation of, 1656.
2-*p*-Methoxystyryl-1:4-α-naphthapyrone, 870.
5-Methoxy-*o*- and -*p*-toluidines, bromo-, 1423.
Methyl, free, reactions of, 366, 372.
Methyl alcohol, reaction of, with hydrogen chloride, 599.
(−)**Methyl** β-octyl sulphide, 1081.
2-Methyl-(β-1′-acenaphthylethyl)-Δ^{1}-*cyclo*hexene, and its picrate, 670.
***o*-Methylacetophenone**, and ω-bromo-, and their semicarbazones, 999.
α-Methylacrylic acid, β-methoxy- and β-phenoxy-ethyl esters, 716.
2-*O*-Methyl-4-*O*-allyl-5-allylresacetophenone, 632.
4-Methyl-8-allylcoumarin, 7-hydroxy-, 631.
2-Methyl-1-allyl-3:4-dihydrophenanthrene, and its picrate, 1635.
2-*O*-Methyl-4-*O*-allylresacetophenone, 630.
2-*O*-Methyl-5-allylresacetophenone, 632.
4-*O*-Methyl-3-allylresacetophenone, 631.
α-Methylaltroside, 1199.
Methylamine, photochemical decomposition of, 1612.
kinetics of thermal decomposition of, 929.
1-Methylaminobenzselenazole, 1764.
2-Methylaminodiphenyl ether, 2′:4′-*di*nitro-, 1313.
2′-Methylaminodiphenyl sulphide, 2-nitro-, and its derivatives, 184.
4(5)-β-Methylaminoethylglyoxaline, salts, 491.
Methylaniline, dielectric constant and density of, 776.
Methyl-β-1-anthraquinonyloxyethylsulphone, 1237.
β-Methyl-1-arabinoside, crystal structure of, 981.
5-Methyl γ-arabonolactone, 653.
***O*-Methylbebeerilene**, 1389.
***O*-Methylbebeerinemethine** methiodides, 1388.
2-Methyl-6:7-benzhydrindone, 1324.
***o′*-Methylbenzoin**, 225.
5-Methylbenzthiazole, bromohydroxy-derivatives, 1759.
1-hydroxy-, and its salts and derivatives, 1758.
***N*(a)-Methyl-*N*(b)-benzyl*neo*brucidinium** salts, 1293.
Methylbenzyloxybenzoic acids, 1840.
γ-Methylbutane-αα′γ-tricarboxylic acid, ethyl ester, 1128.
2-Methyl-1-Δ$^{\gamma}$-butenyl-3:4-dihydrophenanthrene, and its picrate, 1635.
Methyl*iso*butylamine, α-bromo-, hydrobromide, and *p*-nitrobenzoyl derivative, 414.
***d*- and *l*-α-Methyl*iso*butylamines**, and β-hydroxy-, and their salts and derivatives, 416.
Methyl-*n*-butylglyoxime, nickel derivatives, 623.
Methyl *n*-butyl ketone, photolysis of, 1638.
Methyl α-carbomethoxyethyl carbonate, 1060.
2-Methylchroman, 648.
2-Methylchromene, 648.
Methyl α-cyanoethyl carbonate, 1060.
***N*-Methylcytisine**, 1054.
9-Methyldecalin, preparation of, 737.
***trans*-3-Methyl-α-decalone**, and its semicarbazone, 1068.
2-Methyldeoxybenzoin, 4′-nitro-4-hydroxy-, 1126.
2′-Methyldeoxybenzoin, and its 2:4-dinitrophenylhydrazone, 1125.
Methyldi-*n*-amyl-lead chloride, 43.
2-Methyldibenzyl, 4-hydroxy-, benzoate, 1125.
Methyldiethylarsine mercurichlorides, 398.
Methyldiethylarsonium picrate, hydroxy-, 397, 398.
2-Methyl-1:2-dihydrobenzselenazole, 1-imino-, and 1-nitrosoimino-, 1764.
2-Methyl-1:2-dihydrobenzthiazole, 5-chloro-, 5-iodo-, and 5-nitro-1-nitrosoimino-, 1760.
***N*(b)-Methyl-*des*-dihydrobrucidine-a**, and its derivatives, 1688.
***N*(b)-Methyl-*des*-dihydrobrucidine-b**, and its derivatives, 1693.
***N*(b)-Methyldihydrobrucidinium** salts, 1687.
1-Methyl-3:4-dihydronaphthalene, 1543.
4′-Methyldiphenyl, 2- and 4-nitro-, oxidation of, with chromyl chloride, 114.
***N*-Methyldiphenylamine**, 2′:4′-*di*nitro-2-hydroxy-, 1313.
2′-Methyldiphenyl-6-carboxylic acid, 2:4-*di*nitro-, complex compounds of, with benzene, 1856.
Methylene, free, 381.
Methyleneamines, cyclic, action of benzoyl chloride and of hydrogen sulphide on, 865.
Methyleneazomethines, effect of *p*-alkyl substituents on prototropy in, 1847.
5:6-Methylenedioxybenzyl alcohol, 2:3-*di*bromo-, 725.
3:4-Methylenedioxycinnamic acid, methyl ester, 1413.
2:3-Methylenedioxy-11:12-dimethoxyoxyprotoberbine, synthesis of, 293.
4-(3′:4′-Methylenedioxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylic acid, and 4-6-bromo-, -chloro-, and -nitro-, ethyl esters, 818.
β-3:4-Methylenedioxyphenylpropionic acid, methyl ester, 1413.
6:7-Methylenedioxy-1-(3′:4′:5′-trimethoxyphenyl)-2-chloromethylnaphthalene-3-carboxylic acid, 1580.
6:7-Methylenedioxy-1-(3′:4′:5′-trimethoxyphenyl)-2-hydroxymethylnaphthalene-3-carboxylic lactone, 1580.
6:7-Methylenedioxy-1-(3′:4′:5′-trimethoxyphenyl)-naphthalene-2:3-dicarboxylic acid, and its derivatives, 1580.
Methylenetartaric acid, and its dimethyl ester, rotations of, 1038.

(+)**Methylethylacetyl** chloride, 1080.
Methyl ethyl ketone bisethylmercaptol, 1557.
α-Methyl-1-fucoside, crystal structure of, 981.
3′-Methyl-7:6-furocoumarin, 815.
α-Methylgalactopyranoside acetone, 1019.
α-Methylgalactoside 6-bromohydrin, crystal structure of, 982.
α-Methyl-*d*-galactoside hydrate, crystal structure of, 981.
4-Methyl δ-gluconolactone, 875.
5-Methyl glucosazone, 1400.
4-Methyl glucose, constitution of, and its derivatives, 873.
Methylglycosides, acetone derivatives of, 1012.
α- and β-Methylglucosides, complex compounds of, with metaboric acid, 175.
α-Methylguloside, 689.
3-Methyl*cyclo*hexanecarboxylic acid, 2-bromo-, and *cis*-3-bromo-, 266.
1:2-*di*bromo-, 264.
***dl*-1-Methyl*cyclo*hexane-1:2-diol**, and its bis-3:5-*di*-nitrobenzoate, 1272.
1-Methyl-1:3-*cyclo*hexanolide, 265.
***dl*-1-Methyl*cyclo*hexan-1-ol-2-one**, and its derivatives, 1272.
3-Methyl*cyclo*hexenecarboxylic acids, 264.
Methyl hexoses, 873.
6-Methylhomopiperonoyl-β-piperonylethylamine, and 6-hydroxy-, 665, 666.
6-Methylhomopiperonyl-β-piperonylethylamine, 665.
6-Methylhomopiperonylic acid, 666.
8-Methylhydrindane, 737, 738.
α-Methylmannofuranoside 2:3-5:6-diacetone, 1018.
α- and β-Methylmannopyranosides, acetone compounds of, 1017.
α-Methylmannoside 2:3-acetone, 517.
α-Methyl-*d*-mannuronide, and its potassium salt, 517.
α-Methylmannuronide acetone, potassium salt, 517.
2- and 3-Methyl α-methylaltrosides, 1198.
2-Methylnaphthacene, 77.
2-Methyl-5:6-(1:2-naphtha)-γ-pyran, 1542.
Methylnaphthazarin, and its diacetate and diboroacetate, 333, 335.
α-(4-Methyl-1-naphthyl)ethyl alcohol, and its bromide, 444.
2-Methyl-1-(β-1′-naphthylethyl)*cyclo*hexanol, and its 3:5-dinitrobenzoate, 671.
Methyl-2-naphthylmethylmalonic acid, 1324.
7-Methyl-[0:3:4-*bicyclo*]nonan-2-one-3:4-dicarboxylic acid, derivatives of, 479.
Methyloctahydrochrysene, and its picrate, 671.
2-Methyloctahydropyrrocoline, and 3-hydroxy-, and their salts, 1745.
***trans*-3-Methyl-Δ²-octal-1-one**, 1068.
***trans*-3-Methyl-Δ²-octal-1-one-4-carboxylic acid**, ethyl ester, 1068.
2-Methyloximino-2-phenylindolone, 1210.
1-Methyl*cyclo*pentane-1-carboxy-2-acetic acid, 1068.
β-Methylpentane-ββδε-tetracarboxylic acid, ethyl ester, 1128.
β-Methylpentane-ββε-tricarboxylic acid, and its ethyl ester, 1128.
1-Methyl-Δ²-*cyclo*pentene-1-carboxylic acid, and its ethyl ester, 1536.
α-Methylpentenoic acids, 258, 266.
3′-Methyl-1:2-*cyclo*pentenophenanthrene, preparation and identification of, 644.
styphnate, 445.
9-Methyl-1:2-*cyclo*pentenophenanthrene, and its derivatives, 443.
1-Methyl-Δ²-*cyclo*pentenyl-1-carbinol, and its *p*-nitrobenzoate, 1536.
1-Methyl-Δ²-*cyclo*pentenylmethyl chloride, 1536.
9-Methylphenanthrene, 9-chloro-, 1323.
9-Methylphenanthridine, 3-bromo-, and its derivatives, 1407.
2-Methylphenaxine, 741.
2-Methylphenoxarsine, 10-chloro-, 1051.
3-Methylphenoxaxine, 3-nitro-, 1313.
5-Methyl-2-*iso*propylcinnamic acid, 1030.
Methyl-*n*-propylglyoxime, nickel derivatives, 622.
7-Methyl-4-*iso*propyl-1-hydrindone, 1030.
2-Methyl-1-*n*-propylphenanthrene, and its *s*-trinitrobenzene complex, 1635.
α-Methyl-δ-*iso*propylpimelic acid, and its derivatives, 316.
8-Methylquinoline, derivatives of, 1421.
ω-substituted derivatives of, 1143.
8-Methylquinoline, 3-bromo-6-nitro-, 1424.
Methylselenonic acid, 904.
Methyltetrahydrobrucidine, hydroxy-, and its acetyl derivative, 1691.
Methyltetrahydro-1:2:5:6-dibenzfluorene, 1325.
2-Methyl-1:2:3:4-tetrahydronaphthacene, 82.
1-Methyl-1:2:3:4-tetrahydro-1:2-*cyclo*pentenophenanthrene, 7-hydroxy-, 455.
2-Methyltetrahydrophenazines, 741.
5-Methyl-α-tetralone, and its derivatives, 999.
5-Methyl-α-tetralone-2-carboxylic acid, ethyl ester, 999.
4-Methylthiazole-5-carboxylic acid, and its esters, 1030.
Methylthioformaldin hydrobromide, 866.
3-Methyl-4:5-thionaphthenopyrazole, and its dioxide, 473.
***N*-Methyl-*p*-toluenesulphon-*o*-anisidide**, 1313.
Methyltri-*n*-butyltin, 41.
Methyltrimethylphosphonium iodide, 464.
Methyltri-*n*-propyltin, 41.
***O*-Methyltubocurarine** iodide, 1386.
***O*-Methyltubocurarinemethine** methiodides, 1387.
α-Methyl-*n*-valeric acid, *l*-methyl ester, action of, with phenylmagnesium bromide, 1218.
Michael reaction, 420, 857.
Micro-organisms, formation of organo-metalloidal compounds by, 396.
Molecular structure and dipole moments, 987, 989.
compounds, formation of, in solution, 1709.
Molybdenite, Australian, rhenium from, 567.
Moulds, unicellular, 201.

N.

Naphthacene, homologues of, 77.
β-Naphthaflavone, 870.
1′:2′-Naphtha-2:3-fluorene, 1323.
1′:2′-Naphtha-2:3-fluorenone, 1324.
Naphthalene, condensation of, with phthalic anhydride, 1031.
derivatives, homonuclear, salt formation of, 1850.
peri-substituted derivatives, prediction of restricted rotation in, 319.
reactivity of, 317.
Naphthalene, 1-chloro-3-nitro-, 1851.
Naphthalene-4-azo-β-naphthol, 2-nitro-1-hydroxy-, 673.
Naphthalene-1:3-carboxysulphonic anhydride, 318.
Naphthalimide, 3-nitro-, 497.
Naphthalomethylimide, 4-benzoyl derivative, and 3-amino-, 3-hydroxy-, and 3-*mono*- and 3:6-*di*-nitro-, and their derivatives, 497.
1:2-Naphthaquinone, 4-chloro-, 1853.
1:4-Naphthaquinone, 2-*mono*- and 2:3-*di*-hydroxy-, and their pyridine salts, 336.
2-iodo-, 1853.
Naphthaquinones, absorption spectra and colour reactions of, 325.

α-Naphthaselenazole, 1-amino-, and its acetyl derivative, and 1-thiol-, 1766.
Naphthastyril, 4:5-*di*nitro-, 318.
α-Naphthoic acid, 8-halogeno-derivatives, reactions of, 317.
α-Naphthol, and its methyl ether, mononitration of, 671.
α-Naphthol, 2-bromo- and 2-iodo-4-nitro-, 1852.
3-bromo-2-nitro-4-amino-, 4-chloro-2-nitro-, 3-chloro-2-nitro-4-amino-, 3-iodo-2-nitro-4-amino-, 2-nitro-4-amino-, and 2:3-*di*nitro-4-amino-, and their derivatives, 674.
2:4-*di*nitro-, monoreduction of, 671.
***r*-*o*-β-Naphtholazomandelic acid**, 107.
1-Naphthol-2:4-dicarboxylic acid, synthesis of, and its ethyl ester, 1061.
β-Naphthol-1-sulphonic acid, reaction of diazosulphonates from, 1134, 1796, 1808.
***o*-β-Naphthoylbenzoic acid**, 1369.
3-α- and -β-Naphthoyl-2-naphthoic acids, 1369.
α-Naphthyl methyl ether, 2- and 3-nitro-4-amino-, 4-acetyl derivatives, 673.
α-Naphthylamine, 2-bromo-4-amino-, and 2-bromo-3-nitro-4-amino-, 4-acetyl derivatives, 674.
4-chloro-2-nitro-, 4-iodo-2-nitro-, and 2-nitro-, and their salts and derivatives, 1850.
2- and 4-nitro-, action of bromine on, 1596.
β-Naphthylamine, purification and determination of, in presence of α-naphthylamine, and its sulphonyl derivatives, 1854.
***p*-Naphthylamine**, 3-bromo-, 3-bromo-1-nitro-, and 3-bromo-1:6-*di*nitro-, 1595.
4-bromo-, 4-chloro-, and 4-iodo-, and their salts and derivatives, 1851.
Naphthylenediamines, bromo-, chloro-, and iodo-, and their salts and derivatives, 1851.
1:2-Naphthylenediamine, 3-bromo-, 1595.
2-β-1′-Naphthylethyl-1-methyl*cyclo*pentan-2-ol-1-carboxylic acid, methyl ester, and its amide, 1531.
1-(β-1′-Naphthylethyl)-Δ¹-*cyclo*pentene nitrosochloride, 1571.
2-(β-1′-Naphthylethyl)-Δ²-*cyclo*pentenone, and its derivatives, 1571.
Naphthylideneacetophenone, 2-hydroxy-, 1164.
2-β-Naphthylmethyl*cyclo*hexanone-2-carboxylic acid, ethyl ester, 1322.
β-2-Naphthyl-α-methylpropionic acid, 1324.
ω-β-Naphthyl-*o*-toluic acid, 1031.
Neodymium nitrate, solubility of, in water, 1430.
Nickel, quadricovalent, configuration of, 459, 1475.
Nickel sulphate *hepta*hydrate, nucleus formation on crystals of, 1705.
sulphide, precipitated, composition and properties of, 1459.
Nickel organic compounds, complex, dimagnetic, planar configuration of, 621.
Nickel benzeneazo-naphthoxides, -phenoxide, and -*p*-tolyloxide, 1599.
dibenzoinoxime, and its diacetate, 821.
glyoximes, 621.
3-tolueneazo-*p*-tolyloxide, 1599.
Nickelodithio-oxalic acid, potassium salt, 1479.
Niobium, at. wt. of, 792.
Nitration, function of sulphuric acid in, 785.
Nitric acid. See under Nitrogen.
Nitriles, aliphatic, dipole moments of, 604.
*poly*Nitro-compounds, complexes of, 976.
complex formation of, with aromatic hydrocarbons, 580, 1856.
Nitro-groups, acidifying action of, 1.
Nitrogen, at. wt. of, 789.
Nitrogen oxides, properties of, 692.
Nitric acid, relative oxidation potentials of solutions of, 125.
Nitrogen:—
Nitrous acid, action of, on tertiary amines, 53.
Nitrous acid. See under Nitrogen.
Non-electrolytes, solubility of, 280, 952.
Norlupinane, 1744.
***d*-*cis*-Norcaryophyllenic acid**, 534.

O.

Obituary notices:—
Walter Ernest Adeney, 1891.
Leonard Archbutt, 859.
Kenneth Frankland Armstrong, 1892.
Harford Montgomery Atkinson, 1327.
Herbert Brereton Baker, 1893.
William Barlow, 1328.
James Munsie Bell, 860.
Hubert Vernon Bettley-Cooke, 1330.
Arthur Bramley, 1896.
Samuel Francis Burford, 1897.
Julius Berend Cohen, 1331.
Harry Cooper, 1898.
Guiseppe Grassi Cristaldi, 860.
Charles Frederick Cross, 1337.
Thomas Cuthbert Day, 1340.
John Denton, 407.
Peter Fenton, 1340.
Harold Follows, 1341.
William Thomas Gent, 861.
Victor John Harding, 1341.
Frederick Beaumont Hirst, 1344.
George William Fraser Holroyd, 407.
Egbert Grant Hooper, 1899.
Charles Thomas Kingzett, 1899.
Carl Langer, 1344.
John Walter Leather, 1345.
Jakob Meisenheimer, 1355.
Sidney Morgan, 1346.
Arthur William Nunn, 861.
Sven Ludvig Alexander Odén, 862.
Daniel J. O'Mahony, 408.
Frederick Lawrence Overend, 1902.
Lewis Gordon Paul, 409.
Charles H. Ridsdale, 409.
Walter Ritchings, 1903.
Allan Winter Rowe, 863.
Ernest Henry Saniter, 410.
George William Slatter, 1903.
Christopher Caiger Smith, 1904.
Andrew Jamieson Walker, 1904.
Sir James Walker, 1347.
James Alfred Wilkinson, 1354.
Francis Samuel Young, 1907.
Octadeuteronaphthalene, and its picrate, 1325.
Octahydro-1:2:3:4-dibenzanthracene, 1684.
Octahydro-1:2:3:4-dibenzanthranyl acetate, 1684.
Octahydro-1:2:3:4-dibenzanthraquinone, 1684.
Octahydro-1:2:3:4-dibenzanthrone, 1684.
***s*-Octahydrochrysene**, 1636.
Octahydro-1:1′-dinaphthyl, 1:1′-*di*hydroxy-, 1107.
Octahydrodiphenyl. See Di-Δ¹·¹-*cyclo*hexene.
***s*-Octahydrophenanthrene**, condensation of phthalic anhydride with, 1684.
***as*-Octahydrophenanthrene**, use of, in syntheses, 767.
6-*as*-Octahydrophenanthroic acid, 768.
***o*-Octahydrophenanthroylbenzoic acid**, and 4′:5′-*di*chloro-, 1684.
β-6-*as*-Octahydrophenanthroylpropionic acid, 768.
γ-6-*as*-Octahydrophenanthrylbutyric acid, 768.
ω-Octahydrophenanthryl-*o*-toluic acid, 1684.
1:2:3:4:9:10:11:12-Octahydrophenazine, 740.
Octahydrotetra*cyclo*pentenoanthraquinone, 1106.
Δ⁹·¹⁰-α-Octalone, 1638.
***bicyclo*[0:3:3]Octane**, derivatives of, 474.

cis- and *trans-bicyclo***Octanes**, 442.
*d-trans-β-***0:3:3-***bicyclo***Octanone**, and its semicarbazone, 1071.
0:3:3-*bicyclo***Octanones**, 436.
*bicyclo***[0:3:3]Octan-1-one-2:3-dicarboxylic acid**, ethyl ester, and its semicarbazone, 476.
*dl-sec.-***Octyl** iodide, interchange reaction of, with sodium iodide in acetone solution, 1525.
*α-n-***Octyladipic acid**, 1542.
*sec.-***Octylaniline**, and its *p*-toluenesulphonyl derivative, 1282.
*p-n-***Octyloxybenzoic acid**, 1874.
2-*n***-Octyl***cyclo***pentanol**, 1542.
2-*n***-Octyl***cyclo***pentanone**, and its semicarbazone, 1542.
1-*n***-Octyl***cyclo***pentan-2-one-1-carboxylic acid**, ethyl ester, and its semicarbazone, 1542.
(—)**β-Octylpiperidine**, 1081.
(—)**β-Octylthiol**, 1081.
(—)*N*-**β-Octyl-***p***-toluidine**, 1081.
Œstratriene, *di*hydroxy-, methyl ether, 450.
Œstrin, structure of, 445.
Œstrone methyl ether, 449.
Oils, natural, unsaturated acids of, 759, 761, 1630, 1632.
Olefines, formation of, 1514.
addition of aniline to, 1279.
Optical activity and tautomerism, 1778.
in relation to multiplanar rings, 1069.
inversion, Walden's, 1525.
Organic compounds, dipole moment and structure of, 855.
isotopic exchange reactions in, 1735.
rotatory dispersion of, 696, 704, 709, 1313.
containing angular methyl groups, action of selenium on, 735.
Organo-metalloidal compounds, formation of, by micro-organisms, 396.
Orthoformic acid, ethyl ester, parachor of, 207.
Oxalic acid, reaction of, with potassium permanganate, 1303.
manganese salt, dihydrate, dissociation of, 321.
ethyl ester, condensation of, with tetrahydrocarvone, 315.
Oxidation in aqueous solution, 1605.
*p-***Oxyarsinopimelanilic acid**, 291.
*p-***Oxyarsinosuberanilic acid**, 292.
Oxygen, kinetics of reaction of, with sulphur, 1767.

P.

Palladium, parachor of, in simple and complex compounds, 1549.
dissociation pressure of combination of, with hydrogen, 1254.
Palladium, quadricovalent, configuration of, 459, 1475.
Palladium bases :—
Diamminopalladium compounds, structure and configuration of, 1642.
Tetra-amminopalladium compounds, 1648.
Palladium organic compounds :—
Palladium dibenzoinoxime, 821.
mercaptides, 1561.
Palladodithio-oxalic acid, potassium salt, 1479.
Parinarium laurinum, unsaturated acid from kernels of, 759.
Parinarium macrophyllum, unsaturated acid from kernels of, 761.
Peltogyne, peltogynol from wood of species of, 745.
Peltogynol, isolation and molecular structure of, and its derivatives, 744.
Penta-acetyl-μ-fructose, optical cancellation in, 696.
*cyclo***Pentadiene**, thermochemistry and kinetics of reaction of, with benzoquinone, 829.
*cyclo***Pentadiene**, addition of benzoquinone and of maleic anhydride to, 1511.
*cyclo***Pentadienebenzoquinone**, dipole moment of, 1697.
2:3:4:6:7-Pentamethyl β-α-glucoheptose, crystal structure of, 1503.
*n-***Pentane**, **γγδ-***tri*chloro-α-amino-β-hydroxy-, and it salts and derivatives, 1624.
γγδ-*tri*chloro-α-nitro-β-hydroxy-, and its acetyl derivative, 1179.
*trans-cyclo***Pentane-1-carboxylic-2-acetoacetic acid**, ethyl ester, 1068.
*trans-cyclo***Pentane-1:2-diacetic acid**, preparation of, 440.
d- and *l-trans-cyclo***Pentane-1:2-diacetic acids**, 1071.
*cyclo***Pentane-1:1-dicarboxylic acid**, and its sodium salt, dissociation constants of, 1628.
*cyclo***Pentanedicarboxylic acids**, dissociation constants of, 949.
esters, hydrolysis of, 1482.
*n-***Pentane-αββγεε-hexacarboxylic acid**, methyl ester, 193.
*cyclo***Pentane-2-β-propionic acid**, and its derivatives, 1068.
*n-***Pentane-αβγε-tetracarboxylic acid**, and its barium salt and methyl ester, 193.
*cyclo***Pentanol-1:2-diacetic acid**, lactone, 440.
*cyclo***Pentanol-2-β-propionolactone**, 1543.
*cyclo***Pentanone-2-carboxylic-2-β-propionic acid**, ethyl ester, 983.
*cyclo***Pentanone-2-β-propionic acid**, 983.
*cyclo***Pentanone-2-β-propionolactone**, 1543.
Δ^1-*cyclo***Pentenecarboxylic acid**, ethyl ester, condensation of, with ethyl sodiocyanoacetate, 475.
Δ^1-*cyclo***Pentene-1-carboxylic acid**, 2-chloro-, and its ethyl ester, 1540.
*β-cyclo***Pentylpropionic acid**, and its phenyl hydrazide, 984.
Phellandral *mono-* and *di*-nitrophenylhydrazones, 152.
4-Phenacylflavylium ferrichloride, 87.
9-Phenacyl-1:2:3:4:10-11-hexahydroxanthen, 11-hydroxy-, 1117.
7-Phenacyloxycoumarin, 815.
Phenacyl-*m***-toluidine**, 1210.
Phenanthrapyrimidazine, thiolhydroxy-, 469.
Phenanthrene, alkyl derivatives, absorption spectra of, 509.
hydrogenated derivatives, absorption spectra of, 512.
Phenanthrene, 2:5-*di*hydroxy-, 1542.
Phenanthridine, 3:9-*di*bromo-, 1407.
Phenanthridine series, 1405.
Phenanthridone, amino-, bromo-, hydroxy-, and nitro-derivatives, 1406.
*o-***9-Phenanthroylbenzoic acid**, 1369.
2-(3′-Phenanthrylmethyl)*cyclo***hexanone-2-carboxylic acid**, ethyl ester, 1323.
Phenazine, complexes of, with phenylenediamines and diphenylamine, 740.
Phenazine series, syntheses in, 738.
Phenazine-2-carboxylic acid, 741.
Phenazine–*N*-**methyldihydrophenazine** *di*hydrochloride, 740.
β-*p***-Phenetidinocrotono-***p***-phenetidide**, 113.
γ-Phenetoylbutyric acid, 856.
δ-Phenetoylvaleric acid, 1093.
ε-*p***-Phenetylhexoic acid**, 1093.
*p***-Phenetylthiocarbamic acid**, methyl ester, 1760.
*p***-Phenetylthiourethane**, 1760.
Phenols, *mono*halogenated, dissociation constants of, 1821.
substituted, β-hydroxyethyl ethers of, 1098.
Phenolic ethers, halogenation of, 1831, 1835.
γ-Phenoxybutyric acid, α-amino-, ethyl ester, hydrochloride, 490.

δ-Phenoxy*tri*chloromethylthiol, and 2-chloro-, 681.
4(5)-β-Phenoxyethylglyoxaline, 491.
4(5)-β-Phenoxyethyl-2-thiolglyoxaline, 490.
Phenyl, free, 380.
Phenyl alkyl ethers, chloro-, 1834.
benzyl ethers, bromo-, and chloro-, substituted, 1839.
γ-bromopropyl ether, *p*-bromo-, 1834.
Phenyl *n*- and *iso*-butyl sulphides, 1556.
8-carboxy-1-naphthyl sulphide, 318.
8-carboxy-1-naphthyl sulphoxide, optical resolution of, 319.
cetyl ethers, *p*-bromo-, and *p*-chloro-, 1834.
picryl sulphide, 2-amino-, derivatives, 342.
(+)Phenyl β-octyl sulphide, 1082.
(−)Phenyl *n*-butyl ether, 1079.
β-octyl ether, 1082.
(−)Phenyl α-phenyl-β-propyl sulphide, 1084.
Phenylacetic acid, and its sodium salt, as new buffer solution, 912.
ethyl ester, oxidation of, with selenium dioxide, 903.
substituted derivatives, electrolytic dissociation of, 346.
Phenylamino-. See Anilino-.
2-Phenyl-4-anisyl-5:6-naphtha(1′:2′)pyrylium picrate, 945.
β-Phenyl-β-anthranylpropionic acid, 1103.
β-Phenyl-β-anthronylpropionic acid, 1103.
Phenylarsinic acid, *m*-amino-, action of hydrobromic acid on, 470.
Phenylazo-. See Benzeneazo-.
2-Phenylbenzamidophenyl methyl sulphide, 2-*o*-nitro-, 342.
2-Phenylbenzamidophenylmethylsulphone, 2-*o*-nitro-, 342.
***p*-Phenylbenzhydrylidene-benzylamine**, 1784.
2-Phenylbenziminazole-*o*-carboxylic acid, 5-chloro-, 1806.
***p*-Phenylbenzophenone** 2:4-*di*nitrophenylhydrazone, 1785.
2-Phenylbenzopyranol 4-ethyl ether, 1164.
2-Phenylbenzthiazoline *S*-*di*oxide, 5-nitro-, 1265.
Phenylbenzylindenes, 1020.
Phenyl β-*p*-bromophenyl-β-phenylethyl ketone, *p*-bromo-, 991.
α-Phenylbutadiene, polymerisation of, 1359.
δ-Phenyl-*n*-butane-αβγ-tricarboxylic acid, ethyl ester, 1360.
δ-Phenyl-*n*-butanetricarboxylic acids, 1360.
Phenyl-*n*-butylglyoxime, *p*-chloro-, nickel derivative, 623.
s-Phenylcinnamylthiourea, 1362.
4-Phenyl-2:3-coumareno(3′:2′)chromylium chloride, 7:6′-*di*hydroxy-, 943.
3-Phenyl-3:4-dihydrophthalazine-4-acetic acid, 1-hydroxy-3-2′-amino-, and -3-(chloro-2′-amino)-, and their derivatives, 1805.
1-hydroxy-3-2′-bromo-4′-amino-, and 1-hydroxy-3-2′-bromo-4′-nitro-, and their derivatives, 1135.
1-hydroxy-3-2′-nitro-, and 1-hydroxy-3-chloro-nitro-, and their derivatives, 1803.
3-Phenyl-3:4-dihydrophthalazine-1-sulphonic-4-acetic acid, 3-2′-bromo-4′-nitro-, sodium hydrogen salt, 1135.
3-4′-chloro-2′-nitro-, and 3-2′-nitro-, sodium hydrogen salts, 1803.
5-Phenyldihydroresorcinol, 5-*o*-chloro-, 539.
2-Phenyl-1:1-dimethylbenzthiazoline *S*-*di*oxide, 5-nitro-, 1265.
β-Phenyl-βγ-dimethylbutane, β-*p*-amino-, and its hydrochloride and acetyl derivative, 1282.
Phenyl-*NN*′-dimethyl-9:10-dihydrophenazine *di*-hydrochloride, 740.
1-Phenyl-2:3-dimethylindene, 1-hydroxy-, 1161.
Phenyl ββ-diphenylethyl ketone, *p*-chloro-, 991.
Phenyldi-*p*-tolylguanidines, preparation of, 680.
Phenylenebis-β-aminocrotonic acids, ethyl esters, 1569.
***p*-Phenylenediamine**, tetrazotisation of, 530.
***endo*-9:10-*o*-Phenylenetetradecahydro-1:2:3:4-dibenz-naphthacenequinone**, 1107.
***p*-β-Phenylethoxybenzoic acid**, 1834.
β-Phenylethyl alcohol, *p*-chloro-, and *p*-iodo-, 1820.
β-Phenylethyl benzoates, *p*-amino-, and *p*-fluoro-, 1821.
chlorides, *p*-bromo-, *p*-chloro-, *p*-fluoro-, and *p*-iodo-, 1820.
1-β-Phenylethyl-Δ¹-*cyclo*hexene nitrosochloride, 1571.
2-β-Phenylethyl-Δ²-*cyclo*hexenone, and its derivatives, 1571.
3-β-Phenylethyl-2-methyl-4:5-benzindene, and its picrate, 1325.
3-β-Phenylethylphthalic anhydride, 434.
3-β-Phenylethyl-1:2:3:6-tetrahydrophthalic acid, potassium hydrogen salt and anhydride, 43.
β-Phenylethyltrimethylammonium chloride hydrochloride, β-*p*-amino-, 872.
4-Phenylflavylium salts, 7-hydroxy-4-*p*-hydroxy-, and 6:7-, 7:4′-, and 7:8-*di*hydroxy-, 942.
3′-Phenyl-7:6-furocoumarin, 815.
Phenylglycine, *N*-nitroso-, and its derivatives, action of acetic anhydride on, 899.
ζ-Phenyl-Δ^αγ-hexadiene, 433.
ζ-Phenyl-Δ^α-hexen-δ-ol, and its 3:5-dinitrobenzoate, 432.
ζ-Phenyl-Δ^α-hexen-γ-ol, and its 3:5-dinitrobenzoate, 433.
Phenylhydrazine, 2-bromo- and 2-chloro-4-nitro-, 92.
2:6-*di*bromo- and 2:6-*di*chloro-4-nitro-, 1813.
Phenylhydrazines, nitro-, absorption spectra of, 1563.
Phenylhydrazones, nitro-, action of titanous chloride on, 151.
***trans*-γ-Phenyl-α-1-hydroxyhydrindene-1-butyric acid**, and its *cis*-lactones, 15.
***trans*-β-Phenyl-α-1-hydroxyhydrindene-2-propionic acid**, β-*p*-bromo-, and its derivatives, 16.
2-Phenylindole, 3-oximino-, 1209.
Phenylmethoxyacetic acid, *r*-*o*-nitro-, and its ethyl ester, 107.
(−)Phenylmethoxyacetonitrile, 194.
1-Phenylmethylaminobenzselenazole picrate, 1764.
2-Phenyl-3-methylbenzopyranol 2-ethyl ether, 1164.
2-Phenyl-1-methylbenzthiazoline *S*-*di*oxide, 5-nitro-, 1265.
2-Phenyl-1-methylbenzthiazolonium salts, 2-*o*-nitro-, 187.
δ-Phenyl-α-methyl-*n*-butane-αα-*trans*-βγ-tetracarboxylic acid, ethyl ester, 424.
δ-Phenyl-α-methyl-*n*-butane-α-*trans*-βγ-tricarboxylic acid, 424.
Phenylmethylformamidine hydrochloride, 678.
Phenylmethylglyoxime, *p*-chloro-, nickel derivative, 623.
ζ-Phenyl-δ-methyl-Δ^αγ-hexadiene, 433.
ζ-Phenyl-δ-methyl-Δ^α-hexen-δ-ol, and its 3:5-dinitrobenzoate, 432.
3-Phenyl-2-methylhydrindanone, 1160.
1-Phenyl-2-methylindene, 1-hydroxy-, 1159.
3-Phenyl-2-methylindene, 1-chloro-, and 1-hydroxy-, acetyl derivative, 1160.
2-Phenyl-1-methylindole, and 3-nitroso-, 1210.
2-Phenyl-6-methylindole, and its picrate, 1210.
2-Phenylmethylindoles, 3-oximino-, 1211.
2-Phenylmethylindolenines, 3-oximino-, acetyl and benzoyl derivatives, 1211.
3-Phenyl-2-methyl-1:4-α-naphthapyrone, 870.
10-Phenyl-2-methylphenoxarsine, and its salts, 1052.

3-Phenylmethylphthalazones bromoamino-, and bromonitro-, 1137.
3-Phenyl-4-methylphthalaz-1-one, 2′-amino-, and 4′-chloro-2′-amino-, and their acetyl derivatives, 1808.
4′-chloro-2′-nitro-, and 2′-nitro-, and their picrates, 1807.
β-Phenyl-α-methylpropionamide, 424.
s-Phenylmethylselenourea, 1764.
1-Phenyl-3-methyl-4:5-thionaphthenopyrazole, and 1-*p*-bromo-, and its dioxide, 472.
2-Phenylnaphthapyranol 4-ethyl ether, 1164.
***N*-Phenylnaphthastyril**, 318.
α-Phenyl-γγ-(α-naphthyl)-*n*-butyrolactone, γ-hydroxy-, 1370.
s-Phenyl-β-naphthylselenourea, 1766.
***aci*-Phenylnitromethane**, and *p*-bromo-, methyl ethers, 5, 6.
4-(α-Phenylphenacyl)flavene, 1117.
4-(α-Phenylphenacyl)flavylium ferrichloride, 1117.
4-(α-Phenylphenacylidene)flavene, 1117.
Phenylphenoxazine, 3-nitro-6-*di*nitro-, 1313.
3-Phenylphthalaz-1-one, 2′-bromo-4′-amino-, and 2′-bromo-4′-nitro-, 1136.
4′-chloro-2′-amino-, and its acetyl derivative, and 4′-chloro-2′-nitro-, and 2′-nitro-, 1805.
3-Phenylphthalaz-1-one-4-acetic acid, 2′-amino-, and 4′-chloro-2′-amino-, lactams, 1807.
***N*-Phenylphthalimidine**, 2′-bromo-4′-amino-, 1136.
β-Phenylpropaldehyde, preparation of, 432.
β-Phenylpropaldehyde, αβ-*di*bromo-, ωαβ-*tri*bromo-, and ωαβ-*tri*chloro-, halogeno-, halogenonitro-, and nitro-phenylhydrazones, 91.
α-Phenylpropane, (+)β-amino-, (+)β-bromo-, (−)β-chloro-, (−)β-cyano-, and (−)β-thiocyano-, 1083.
β-Phenylpropionic acid, ethyl ester, oxidation of, with selenium dioxide, 902.
β-Phenylpropionic acid, *d*- and *l*-β-bromo-, *l*-β-cyano-, ethyl esters, 1666.
***d*-β-Phenylpropionic acid**, α-β-hydroxy-, ethyl ester, *p*-toluenesulphinic and *p*-toluenesulphonyl esters of, Walden inversion with, 1663.
p-γ-Phenylpropoxybenzoic acid, 1834.
γ-Phenyl-*n*-propyl alcohol, preparation of, 433.
(−)β-Phenyl*iso*propyl *di*sulphide, 1083.
2-Phenyl-4-*iso*propylideneoxazolone, 534.
(−)α-Phenyl-β-propylthiol, 1083.
2(or 3)-Phenylpyrimidazine, 7-thiol-9-hydroxy-, 469.
4-Phenylquinoline, and its picrate, 301.
2-Phenyl-1-styrylthiazolinium iodide, 2-*o*-nitro-, 1264.
Phenylsuccinic acid series, 157.
Phenylsuccinic anhydride, condensation of, with veratrole in presence of aluminium chloride, 1414.
Phenylthioncarbamic acid, and *p*-bromo-, methyl esters, 1760.
Phenylthiourethane, *p*-iodo-, 1760.
(+)Phenyl-*p*-tolylglycollic acid, and its ethyl ester, 154.
Phenyltriethylsilicane, nitration of, 1088.
Phenyltrimethylammonium iodide, *p*-hydroxy-, action of nitric acid on, 116.
iodide and nitrate, iodo-3-nitro-4-hydroxy-, 116.
α-Phenyl-αγγ-triphenylallene, α-*p*-chloro-, 991.
2-Phenyl-3-triphenylmethylindole, 1210.
α-Phenyl-αγγ-triphenylpropyl alcohol, α-*p*-chloro-, 991.
α-Phenyl-αγγ-triphenyl-Δ$^{\alpha}$-propylene, α-*p*-chloro-, 991.
α-Phenyl-γ-veratrylbutyric acid, 1416.
β-Phenyl-β-vinylpropionic acid, 1364.
Phosphines, tertiary, additive compounds of, 1786.
Phosphomolybdic acid, and its salts, structure of, 578.
12-Phosphotungstic acid, and its salts, structure of, 576.
Photochemical reactions, free radicals and atoms in, 1151.
primary, 455, 1504, 1638.
Phthalic acid, methyl α-carbethoxyethyl ester, 405.
Phthalic anhydride, condensation of, with naphthalene, 1031.
with *s*-octahydrophenanthrene, 1684.
Phthalic anhydrides, Grignard reactions with, 1367.
Phthalo-*p*-*tert*.-butylbenzylimide, 1848.
Phthalocyanines, *X*-ray structure of, 615.
Phthalo-γ-phenylpropylimide, 1362.
Phthalyl-2′-bromo-4′-nitrophenylhydrazide, 1813.
Phthalyl-2′:6′-*di*bromo-4′-nitrophenylhydrazide, 1814.
Phthalyl-2′-chloro-4′-nitrophenylhydrazide, 1813.
Phthalyl-2′:6′-*di*chloro-4′-nitrophenylhydrazide, 1814.
Phthalyl-4′-nitro-2′-methylphenylhydrazide, 1812.
Phthalylnitrophenylhydrazides, 1811.
Physostigmine. See Eserine.
α-Picoline, reaction of benzyl bromides with, 519.
Picrotic acid, constitution of, 997.
Picrotin, constitution of, 997.
Picrotoxin, 997.
Picrotoxinin, constitution of, 997.
Pimelanilamide-*p*-arsonic acid, and its sodium salt, 291.
Pimelanilido-*pp*′-diarsonic acid, and its disodium salt, 292.
Pimelanilodimethylamide-*p*-arsonic acid, and its sodium salt, 291.
Pimelaniloethylamide-*p*-arsonic acid, and its sodium salt, 291.
Pimelanilomethylamide-*p*-arsonic acid, and its salts, 291.
Pimelanilo-*n*-propylamide-*p*-arsonic acid, and its sodium salt, 292.
Pimelic acid, dissociation constant of, 28.
derivatives of, 290.
β-Piperidinobutylamines, and their picrates, 1425.
β-Piperidinodiethylamine, and its picrate, 1425.
8-(β-Piperidinodiethylaminomethyl)quinoline *tri*-hydrobromide, 1426.
4′-Piperidinodiphenylsulphone, 2:4:3′-*tri*nitro-, 538.
8-(β-Piperidinoethylbutylaminomethyl)quinolines, salts, 1426.
β-Piperidinoethylmethylamine, and its picrate, 1425.
8-(β-Piperidinoethylmethylaminomethyl)quinoline *di*-picrate, 1426.
β-Piperidinoethylpropylamine, and its picrate, 1425.
8-(β-Piperidinoethylpropylaminomethyl)quinoline *tri*-hydrobromide, 1426.
8-Piperidinomethylquinoline, 5-nitro-, and its hydrobromide, 1424.
Piperidinomethylquinolines, and their picrates, 1144.
(−)-β-Piperidino-α-phenylpropane, 1083.
Piperidyl-2-acetic acid ethyl ester, and its picrate, 1744.
Piperidyl-1-acetic-2-β-propionic acid, ethyl ester, 1744.
Piperidyl-2-acetic-1-α-propionic acid, ethyl ester, 1744.
***dl*-Piperitone**, synthesis of, 1585.
***o*-Piperonal**, derivatives of, 725.
***o*-Piperonyl alcohol**, 726.
6-β-Piperonylethylaminomethylhomopiperonylonitrile, 665.
Piperonylpyruvic acid, 6-bromo-, oxime, 667.
Platinum, quadricovalent, configuration of, 459, 839, 1475.
tervalent, possibility of, 1244.
Platinum organic compounds:—
Platinum dibenzoinoxime, 822.
Plati- and **plato-diammines**, 1212.
Platino*di*thio-oxalic acid, potassium salt, 1479.
Podophyllotoxin, structure of, 1576.
Polarisation, dielectric, 602, 604.
and molecular-compound formation in solution, 1709.
molecular, in solution, in relation to dielectric constant of solvent, 773.

Polarisation, molecular orientation, of substances in liquid, dissolved, and gaseous states, 1747.
Polycyclic compounds, substitution in, 1607.
related to sterols, synthesis of, 644.
Polymerisation, 1359.
Polymorphism, 1860.
Polysaccharides, 177, 1201, 1214, 1299.
Polyterpenoid compounds, synthesis of, 500, 1637.
Potassium hydroxide, compound of, with sucrose, 648.
iodide, velocities of reaction of, with β-arylethyl chlorides, 1819.
*per*manganate, reaction of, with oxalic acid, 1303.
Praseodymium nitrate, solubility of, in water, 1430.
magnesium nitrate, solubility of, 357.
Propane, *γγγ-tri*bromo- and *γγγ-tri*chloro-α-nitro-β-hydroxy-, and their acetyl derivatives, 1179.
*γγγ-tri*chloro-α-amino-β-hydroxy-, and its salts and derivatives, 1623.
*cyclo***Propane-1:1-dicarboxylic acid,** and its sodium salt, dissociation constants of, 1627.
n-**Propane-**αα**β-tricarboxylic acid,** β-bromo-, methyl ester, 192.
*cyclo***Propane-1:1:2-tricarboxylic acid,** amide and methyl esters, 193.
Propyl, free, 380.
*iso***Propyl** carbonate, α-cyano-, 1060.
o-**Propylacetanilide,** 307.
p-**Propylacetanilide,** 2-nitro-, 308.
*iso***Propylacetone,** nitroso-, photochemical decomposition of, 1679.
bimolecular, kinetics of depolymerisation of, 30.
2-Propylaniline, 4-nitro-, and its acetyl derivative, 308.
6-nitro-, and its acetyl derivative, 308.
3-Propylaniline, and its acetyl derivative, 308.
4-Propylaniline, 2-nitro-, 308.
*p-iso***Propylbenzaldehyde,** and its *p*-nitrophenylhydrazone, 1848.
5-*n***-Propyl-1:2-benzanthracene,** and its picrate, 769.
5-*n***-Propyl-1:2-benzanthraquinone,** 770.
Propylbenzene, *p*-nitro-, and its acetyl derivative, 308.
m-**Propylbenzonitrile,** 308.
*p-iso***Propylbenzyl** bromide, 1844.
*p-iso***Propylbenzylidenebenzylamine,** 1849.
n-**Propyldibromogold,** 222.
Δ$^{\beta}$-**Propylene-**αα**β-tricarboxylic acid,** methyl ester, reactions of, 188.
4-*iso***Propylcyclohexan-1-one** 2:4-*di*nitrophenylhydrazone, 152.
m-**Propylpropiophenone,** and its semicarbazone, 308.
p-n-**Propylpropiophenone** semicarbazone, 307.
3-*n***-Propylresacetophenone,** 632.
2-Propylresorcinol, 631.
n-**Propyltri-***n***-amyltin,** 41.
n-**Propylurea,** *γγγ-tri*chloro-β-hydroxy-, 1623.
Proteins, *X*-ray study of hydration and denaturation of, 846.
Protoactinium, at. wt. of, 794.
Protoanemonin, 1145.
Protocatechualdehyde 2:4-*di*nitrophenylhydrazone, 152.
Protopine, synthesis of derivatives of, and of allied alkaloids, 663.
Prototropy, kinetic status of ionic intermediates in, 1778.
in cyclic systems, 1156.
Purine nucleosides, constitution of, 1376.
Purine series, rearrangement of allyl ethers in, 1365.
Pyridine, dielectric constant and density of, 776.
reaction of benzyl bromides with, 519.
Pyridinium ferrohalides, 115.
Pyridinium-1-acetic-2-β**-propionic acid,** ethyl ester, bromide, 1744.
Pyridinobromogold, 218.
Pyridinodi-*n***-propylbromogold,** 223.
Pyridyl-2-acetic acid, ethyl ester, and its picrate, 1744.
Pyridylnitropyrazole, 418.
Pyridyl-2-β**-propionic acid,** ethyl ester, and its salts, 1744.
5-Pyridylpyrazole, 3:4-*di*amino-, 4-*mono*- and 3:4-*di*nitro-, 4-nitro-3-amino-, -3-hydroxylamino-, and 3-nitroso-, and their derivatives, 419.
Pyrimidines, 1283.
Pyrogallol, specificity of catalytic iron for action of, with hydrogen peroxide, 826.
Pyrolysis, 400, 714, 1054, 1403.

Q.

Quinidine, action of sulphuric acid on, 966.
β-*iso***Quinidine,** 970.
Quinine, action of sulphuric acid on, 966.
Quinol, 2-amino-, 4-benzoate, 198.
Quinoline, molecular compounds of, with halogenomethanes, 1720.
derivatives, dipole moments and structure of, 1470.
*iso***Quinoline,** *x*-nitro-, structure of, 1470.
n- and *iso*-**Quinolines,** dielectric constants and densities of, 776.
Quinolinium ferrohalides, 115.
Quinolone, 3-hydroxy-, preparation of, 1656.
8-Quinolylmethyl alcohol, and 5-nitro-, 1424.

R.

Racemisation, 1218.
Radicals, free, in photochemical processes, 1151.
organic gaseous, 366, 372, 380.
Radium, at. wt. of, 794.
Ramalina scopulorum, constituents of, 1379.
Ranunculus, protoanemonin from, 1145.
Reactions, mechanism of, 1111.
aromatic side-chain, in relation to polar effects of substituents, 519, 1840, 1844, 1847.
elimination, influence of poles and polar linkings on, 722, 1609.
side-chain, effect of nuclear substituents on, 1167, 1173, 1174.
slow, kinetics of, 1393.
Report of the Council, 541.
Resins, natural, phenolic, constituents of, 633, 636, 1576.
Resorcinol benzoate, bromination of, 946.
Resorcinol, 6-*mono*-, 4:6-*di*- and 2:4:6-*tri*-bromo-, derivatives of, and 4-bromo-6-nitro-, 3-methyl ether, 2:4-*di*bromo-6-nitro-, 3-benzoate, and 4:6-*di*bromo-2-nitro-, 947.
4:6-*di*bromo-, 3-benzoate, nitration of, 946.
Retronecic acid, 15.
Retronecine, and its salts and derivatives, 13.
Retrorsine, and its derivatives, 11.
Rhenium from Australian molybdenite, 567.
Rhodium bases :—
Hydroxopentamminorhodium salts, 779.
Rotenone, synthesis of, and its derivatives, 681, 993, 1371.
Ruthenium compounds, co-ordinated, 569.

S.

Salicylaldoximepalladous chloride, 461.
Salicylidenediacetophenone, reactions of, 1118.

Salts, quaternary, formation of, 1840.
Salt hydrates, kinetics of dissociation of, 321.
α- and β-**Santalols**, 309.
α- and β-**Santalyl chlorides**, 313.
α-**Santalylacetic acid**, 313.
α- and β-**Santalylmalonic acids**, and their ethyl esters, 313.
Selenazoles, unsaturation and tautomeric mobility of, 1762.
Selenium, action of, on compounds containing angular methyl groups, 735.
hydrogenation by means of, 1391.
Selenium *di*oxide as an oxidising agent, 901.
Selenium organic compounds, 554.
Selenocyanic acid, (−)β-butyl ester, 1079.
Senecio, alkaloids of, 11.
Sesquiterpenes, syntheses of, 315.
Silicomolybdic acid, and its salts, structure of, 579.
Silicon hydrides, oxidation of, 1182.
Silicon organic compounds, 1085, 1088.
Silicotungstic acid, and its salts, structure of, 579.
Silver oxide, constitution of, in ammonia and amines, 796.
Smokes, coagulation in, 268.
Sodium, at. wt. of, 790.
Sodium hydroxide, kinetics of action of, on bromoethanes, 1514.
Sodium organic compounds :—
Sodium *m*-4-xylyloxide, action of, with alkyl iodides in ethyl alcohol, 141.
Solubility of non-electrolytes, 280, 952.
Solutions, dielectric polarisation and molecular-compound formation in, 1709.
relation between molecular orientation polarisation in, and in liquid and gaseous states, 1747.
velocity of reaction in, 587, 1147.
Solvents, action of, 229, 1038, 1043.
d-**Sorbose**, crystal structure of, 980.
d-**Sparteine**, 1054.
Spectra, absorption, and residual affinity, 965.
of polycyclic hydrocarbons, 509, 512.
Stannous oxide. See under Tin.
Starch, relation of amylose to, 1201.
dextrins, constitution and chain-length of, 1214.
maize. See Maize starch.
Sterols, synthesis of compounds related to, 429, 445, 1285, 1288, 1412, 1414, 1530, 1533, 1633.
structure of hydrocarbons related to, 93.
synthesis of polycyclic compounds related to, 443, 644.
Sterol group, 1205, 1221.
Stictic acid, and its derivatives, 1380.
Stictinic acid, 1381.
meso-**Stilbenediamine**, 843.
meso-**Stilbene***di***amino***iso*-**butylene***di***aminoplatinous** salts, resolution of, 839.
Stilbene*di***aminoplatinum**, *di*chloro-, 846.
Strophanthidin, constitution of, 443.
Strychnine, 935, 1291, 1685.
3-Styryl-2:3-dihydro-1:4-β*a*-**naphthapyrone**, 868.
2-Styryl-1:4-*a*-**naphthapyrone**, 870.
3-Styryl-1:4-β*a*-**naphthapyrone**, 868.
2-Styryl-3-phenyl-1:4-*a*-**naphthapyrone**, 870.
Suberanilamide-*p*-**arsonic acid**, and its sodium salt, 292.
Suberanilide-*pp'*-**diarsonic acid**, and its disodium salt, 293.
Suberanilodimethylamide-*p*-**arsonic acid**, and its sodium salt, 293.
Suberanilocthylamide-*p*-**arsonic acid**, and its sodium salt, 293.
Suberanilomethylamide-*p*-**arsonic acid**, and its sodium salt, 293.
Suberic acid, dissociation constant of, 28.
derivatives of, 292.
Substance, $C_{18}H_{24}O_2$, from condensation of acetyl-*cyclo*hexene with 1-keto-2-methyl-1:2:3:4-tetrahydronaphthalene, 1287.
$C_{19}H_{14}O$, from α-hydrindene and 1-bromo-2-naphthylmagnesium iodide, 771.
Substitution and optical inversion in aliphatic compounds, 1525.
in polycyclic compounds, 1607.
at saturated carbon atoms, 236, 244, 255.
Succinic acid, dissociation constant of, 28.
Succinic acid, α-bromo-, ethyl ester, condensation of, with ethyl benzylmalonate, 423.
Succinic anhydrides, reaction of Grignard reagents with, 1370.
Succino-*o*-**nitrobenzylimide**, 1278.
Sucrose, compound of, with potassium hydroxide, 648.
Sugars, crystalline structure of, 978, 1495.
acetylated, 1022.
Sulpharsphenamine. See Sulphosalvarsan.
Sulphite liquors, constitution of lactone from, 636.
Sulphonic acids, thiol-, esters, exchange of sulphonyl groups in, 896.
Sulphonium compounds, kinetics of degradation of, 236.
Sulphonylthioethanes, optically active, properties of, 18.
Sulphosalvarsan (*sulpharsphenamine*), constitution of, 805.
preparation of, 1745.
Sulphur, kinetics of reaction of, with hydrogen, 58, 351.
with oxygen, 1767.
Sulphuric acid in nitration, 785.
Sulphurous acid, and its salts, oxidation of, to dithionates, 914.
Dithionic acid, determination of, 923.
Dithionates, formation of, by oxidation of sulphurous acid and sulphites, 914.
Sulphur organic compounds, 530.
Sulphurous acid, esters, pyrolysis of, 1054.

T.

Tartaric acid, dimethylene ester, rotation of, 1038.
ethyl ester, effect of metacetaldehyde on rotation of, 904.
Tautomerism and acidity, 1.
and optical activity, 1778.
ring-chain three-carbon prototropic, 188.
three-carbon, 1735.
Telfairia occidentalis, constituents of oil from, 1630.
Tellurium organic compounds, 554.
Terbium, at. wt. of, 772.
β-**Teresantalylpropionic acid**, methyl ester, 314.
Terpenes, chemistry of, 781.
Terpene compounds, 476, 1127.
2:3:4:6-Tetra-acetyl glucose, syntheses with, and its derivatives, 1022.
2:3:4:6-Tetra-acetylglucosidyl nitrite, 1023.
2:3:4:6-Tetra-acetyl β-**methylglucoside**, 4-*di*chloro-, 1181.
Tetra-*n*- and **-***dl*-**amyl-lead**, 42.
Tetra-*n*-**amyltin**, and its derivatives, 41.
Tetra-*n*-**butyltin**, and its halides, 41.
Tetra(ethylamino)platinous salts, *mono*- and *di*-chloro-, 1250.
Tetra(ethylamino)platinum bromide, bromo-, 1249.
Tetra-*n*-**heptyltin**, 41.
Tetra-*n*-**hexyltin**, 41.
Tetrahydrobenzoic acids, 261.
3:4:5:6-Tetrahydrobenzpyrimidazine, 11-thiol-13-hydroxy-, 469.

Tetrahydrocarvone, condensation of, with ethyl oxalate, 315.
l-**Tetrahydrocarvone** 2:4-*di*nitrophenylhydrazone, 316.
3:4:3′:4′-Tetrahydro-1:1′-dinaphthyl, 1107.
Tetrahydro-1:2:3:4-di*cyclo*pentenoanthraquinone, 1107.
Tetrahydro-5:6:7:8-di*cyclo*penteno-1:4-naphthaquinone, 1106.
1:2:3:6-Tetrahydro-3:4:5:6-di*cyclo*pentenophthalic anhydride, 1106.
1:2:3:4-Tetrahydrodiphenylene oxide, 1133.
1:2:3:4-Tetrahydro-6-naphthanilide, 80.
1:2:3:4-Tetrahydro-6-naphthodiphenylamide, 80.
β-Tetrahydro-1-naphthylethyl alcohol, 1531.
Tetrahydro-α-santalylacetic acid, bromo-, 314.
Tetrahydro-β-santalylacetic acid, and its phenacyl derivatives, 315.
Δ^2-Tetrahydroterephthalic acids, configuration of, 1373.
Δ^3-Tetrahydro-*p*-toluic acid, preparation of, 478.
Tetrahydrotubaic acid, 1372.
Tetrahydrotubaic aldehyde, and its derivatives, 1372.
1:2:3:4-Tetrahydroxanthylium ferrichloride, 1118.
1-(β-5′-Tetralylethyl)*cyclo*hexanol, and its 3:5-dinitrobenzoate, 1636.
1-(β-5′-Tetralylethyl)-Δ^1-*cyclo*hexene, 1636.
4′:5′:6:7-Tetramethoxybenzo-3:4-fluorene-1-carboxylic acid, and its methyl ester, 1579.
5:6:13:14-Tetramethoxyhexahydrochrysene-*a*, 1414.
2:3:11:12-Tetramethoxyoxyprotoberberine, synthesis of, and its iodide, 293.
***O*-Tetramethylfisetinidin** chloride, 751.
1:3:4:5-Tetramethyl β-fructose, crystal structure of, 1504.
2:3:4:6-Tetramethyl α-galactose, crystal structure of, 1503.
Tetramethyl γ-gluconolactone, rotatory dispersion of, 295.
2:3:4:6-Tetramethylglucopyranose, 653.
2:3:4:6-Tetramethyl α-glucose, crystal structure of, 1502.
Tetramethyl α-methylaltroside, 1199.
2:3:4:6-Tetramethyl β-methylgalactoside, crystal structure of, 1504.
2:3:4:6-Tetramethyl α-methylmannoside, crystal structure of, 1503.
***O*-Tetramethylpeltogynol**, 749.
Tetra-*n*-octyltin, 41.
Tetra-β-phenylethyltin, 41.
Tetraphenylsilicane, *tetra-m*-amino-, and its acetyl derivative, 1085.
Tetraphenylsilicanes, *tetra*nitro-, reduction of, 1085.
Tetrapolymethylenoanthracenes, derivatives of, 1104.
Tetra(propylamino)platinic chloride, dichloro-, 1249.
Tetra(propylamino)platinous chloride, 1248.
Tetra*iso*propyl*tetra-m*-aminotetraphenylsilicane, and its tetrahydrochloride, 1086.
Thianthren *di*sulphoxides, configurations of, 625.
Thiocarbonyl *tetra*chloride, constitution and reactions of, 679.
Thiocyanates, rearrangement of, into *iso*thiocyanates, 1361.
Thiocyanic acid, (—)β-butyl and -octyl esters, 1078.
cinnamyl and γ-phenylpropyl esters, 1362.
***iso*Thiocyanic acid**, cinnamyl ester, 1362.
Thiophenylamine, 3-chloro-, 1264.
Thio-ketones, aromatic, action of, with organic azides, 530.
1-Thio-2-methyl-1:2-dihydrobenzselenazole, 1766.
Thionaphthenopyrazoles, 471.
Thiophenol, action of litharge on, 1133.
Thiopyrimidazine derivatives, 467.
Thiopyrones, dipole moments and structure of, 602.
2-Thiouracil, 4:5-*di*amino-, 469.
Thiovioluric acid, 468.
Thujone 2:4-*di*nitrophenylhydrazone, 152.
Thymol, dipole moment of, 480.
Tin :—
Stannous oxide, complex salts of, in aqueous sulphuric acid solution, 1251.
Tin organic compounds :—
Tin alkyls, physical properties of, 39.
Titanium :—
Titanous chloride, action of, on nitrophenylhydrazones, 151.
Tolan, structure of, 855.
Toluene, action of aromatic aldehydes on, in presence of aluminium chloride, 72.
***m*-Tolueneazo-β-naphthol**, 6-*mono*- and 4:6-*di*-bromo-, 1620.
***p*-Tolueneazothiobarbituric acid**, 469.
***p*-Toluenesulphinic acid**, *d*-β-butyl ester, 1077.
***d*-(+)-β-*p*-Toluenesulphinoxy-β-phenylpropionic acid**, ethyl ester, 1666.
***p*-Toluenesulphonic acid**, esters, Walden inversion with, 1072.
d-β-butyl ester, 1077.
***p*-Toluenesulphon-naphthalides**, bromo-, bromonitro-, iodo- and nitro-derivatives, 1594.
2-*p*-Toluenesulphon-1:2-naphthylenediamine, 3-bromo-, 1595.
***p*-Toluenesulphon-*p*-toluidide**, 2-iodo-, 1596.
2-*p*-Toluenesulphonyl 4:6-benzylidene α-methylglucoside, 1198.
3-*p*-Toluenesulphonyl 4:6-benzylidene 2-methyl α-methylaltroside, 1197.
4-*p*-Toluenesulphonyl-2:3-dibenzoyl-6-trityl-α-methylglucoside, 688.
4-*p*-Toluenesulphonyl-2:3-dimethyl-α-methylglucoside, 687.
***p*-Toluenesulphonylnitromethane**, and its nitronic methyl ester, 8.
4-*p*-Toluenesulphonyl-6-trityl-2:3-dimethyl-α-methyl glucoside, 687.
***p*-Toluenethiosulphonic acid**, benzyl and phenyl esters, 898.
***m*-Toluic acid**, 2:4:6-*tri*bromo-, and its derivatives, 71.
2:4:6-*tri*bromo-ω-3-bromo-, and its attempted resolution, 68.
***p*-Toluic acid**, 2-chloro-3:5-*di*nitro-ω-4-chloro-, and its attempted resolution, 68.
***m*-Toluidine**, 6-*mono*- and 4:6-*di*-bromo-, 1619.
(—)**β-*p*-Toluidine-α-phenylpropane**, 1083.
2-*p*-Toluoyl-3:6-dimethylnaphthacene, 79.
6-*p*-Toluoyl-2:7-dimethyl-1:2:3:4-tetrahydronaphthalene, 82.
7-*p*-Toluoyl-2:6-dimethyl-1:2:3:4-tetrahydronaphthalene, 82.
β-*o*-Toluoylethane-αα-dicarboxylic acid, ethyl ester, and its 2:4-dinitrophenylhydrazone, 1000.
***m*-Tolyl** methyl ethers, 4:6-*di*bromo-, and bromonitro-, 1423.
ω-*p*-Tolylacetophenone, ω-nitro-ω-*p*-thio-, 9.
***p*-Tolylarsonic acid**, 3-nitro-, conversion of, into 3-amino-4-carboxyphenylarsonic acid, 470.
Tolylazoacetoacetic acids, *mono*- and *di*-bromonitro-, and nitro-, ethyl esters, 118.
Tolylazo-γ-*mono*- and γγ-*di*-bromoacetoacetic acids, *mono*- and *di*-bromonitro- and nitro-, ethyl esters, 118.
γ-*o*-Tolyl-*n*-butyric acid, 1000.
***p*-Tolylhydrobalata**, *di*hydroxy-, and its *p*-nitrobenzoate, 1243.
γ- and (—)-***p*-Tolylmethylglycollic acids**, 154.
***S*-*p*-Tolyloxy*tri*chloromethylthiol**, 681.
***p*-Tolylthiocarbimide**, 2-bromo-, 1759.
***p*-Tolylthioncarbamic acid**, methyl ester, 1758.
***p*-Tolylthiourethane**, bromo-derivatives, 1759.
***m*-Tolylurea**, 6-*mono*- and 4:6-*di*-bromo-, 1620.

*apo*Toxicarol, constitution of, 681.
3:6:9-Triacetylcarbazole, 742.
Tri-*n*-amylphosphine oxide, 1557.
Triarylpyrylium borofluorides, 1389.
Tribromogold. See under Gold.
Trideuteroacetic deuteracid, 492.
Triethylamine, $\beta\beta'\beta''$-*tri*chloro-, 1217.
Triethylcarbinylbenzene. See *tert.*-Heptylbenzene.
β-3:4:5-Trimethoxybenzoyl-α-(3′:4′-methylenedioxybenzylidene)-β-methylenepropionic acid, 1580.
β-(3:4:5-Trimethoxybenzoyl)-α-3′:4′-methylenedioxybenzylidenepropionic acid, and its γ-lactone, 1580.
β-(3:4:5-Trimethoxybenzoyl)propionic acid, 1580.
5:7:8′-Trimethoxychromeno-(3′:4′-2:3)-chromone, 996.
2:4:5-Trimethoxyphenylacetonitrile, 1373.
2:4:5-Trimethoxyphenylpyruvic acid, 1373.
2:4:6-Tri-*p*-methoxyphenylpyrylium borofluoride, 1390.
Trimethylallylarsonium iodide, 399.
4(5)-β-Trimethylaminoethylglyoxaline, salts, 491.
l-2:3:5-Trimethyl arabonamide, rotatory dispersion of, 1662.
2:3:5-Trimethyl γ-arabonolactone, crystal structure of, 1504.
Trimethylarsine, 399.
O-Trimethylcyanomaclurin, and its acetyl derivative, 754.
Trimethyleneglycol bis-*p*-bromophenyl ethers, 1835.
1:3:4-Trimethyl fructose, crystal structure of, 1503.
Trimethyl glucosazone, 1402.
2:3:6-Trimethyl α-glucose, crystal structure of, 1502.
Trimethyl β-methylglucosides, crystal structure of, 1503.
ζ-(2:2:6-Trimethyl-Δ^1-*cyclo*hexenyl)-δ-methyl-$\Delta^{\nu\epsilon}$-hexadiene-α-carboxylic acid, β-hydroxy-, ethyl ester, 586.
ε-(2:2:6-Trimethyl-Δ^1-*cyclo*hexenyl)-γ-methyl-$\Delta^{\beta\delta}$-pentadien-α-ol, 586.
ε-(2:2:6-Trimethyl-Δ^1-*cyclo*hexenyl)-γ-methylpent-δ-en-α-yn-γ-ol, 586.
ε-(2:2:6-Trimethyl*cyclo*hexyl)-γ-methyl-*n*-amyl bromide, 585.
2:3:5-Trimethyl γ-lyxonolactone, crystal structure of, 1504.
2:3:4-Trimethyl α-lyxose, crystal structure of, 1502.
Trimethyl methylarabinosides, crystal structure of, 1503.
2:3:4-Trimethyl α-methylmannuronide, and its methyl ester, 518.
O-Trimethylpeltogynic acid, 751.
O-Trimethylpeltogynol, 749.
2:2:5-Trimethyl*cyclo*pentanone-5-glyoxylic acid, ethyl ester, 454.
1:9:3′-Trimethyl-1:2-*cyclo*pentano-1:2:3:4-tetrahydrophenanthrene, 444.
2:10:10-Trimethylphenoxarsonium salts, 1052.
Trimethyl-δ-phenyl-*n*-butylammonium-γγ-dicarboxylic acid, ethyl ester, salts of, 723.
Trimethylsucrose *penta*acetate, 651.
2:3:4-Trimethyl δ-xylonolactone, crystal structure of, 1504.
2:3:4-Trimethyl α-xylose, crystal structure of, 1504.
αγγ-Triphenyl-*n*-butyrolactone, γ-hydroxy-, 1370.
2:2:4-Triphenylchroman, 1120.
Triphenylethylsilicane, nitration of, 1088.
Triphenylguanidine, preparation of, 680.
ααγ-Triphenyl-γ-(*o*-hydroxyphenyl)-*n*-propyl alcohol, 1119.
Triphenylmethane, parachor of, 207.
Triphenylmethyl β-chloroethyl ether, 140.
2:4:6-Triphenylpyrylium borofluoride, 1390.
Triphenylsilicol, *tri*-*m*-amino-, and its trihydrochloride, 1087.
1:2:4-Tripropylbenzene, 307.
Tri-*n*-propyl-*n*-butyltin, 41.
Tris-β-phenylethyltrimethylenetriamine, 865.
2:3:4-Tri-*p*-toluenesulphonyl β-methylglucoside, and its 6-dichloroacetyl derivative, 1181.
Tri-*p*-tolylguanidine, preparation of, 680.
Trypanocidal activity and constitution, 155.
Tubocurarine, and its derivatives, 1381.
Tungsten :—
Metatungstic acid, and its salts, structure of, 580.

U.

Ulex europaeus, alkaloids of, 10.
Undecenoic acid, addition of hydrogen bromide to, 1572.
*iso*Undecenoic acid, addition of hydrobromic acid to, 1108.
Undecynoic acid, addition of hydrogen bromide to, 1572.
Unicellular chemistry, 201.
Unsaturated compounds, reactions of, 1279.
conjugated, addition to, 717.

V.

*iso*Valeraldehyde, photochemical decomposition of, 1504.
*iso*Valeric acid, *l*-α-amino-, acetyl derivative, ethyl ester, 415.
Valine, configuration of, 410.
i-Valinol, preparation of, and its derivatives, 413.
d- and *l*-Valinols, and their derivatives, 414.
Vanillin 2:4-*di*nitrophenylhydrazone, 152.
*iso*Vanillin, 2:6-*di*nitro-, ammonium salt, 818.
Vapours, dipole moments of, 971.
Vasicine, constitution of, 1277.
Velocity of reaction in solution, 587, 1147.
slow, and entropy changes, 1393.
Veratraldehyde 2:4-*di*nitrophenylhydrazone, 152.
Veratridine, constitution of, 122.
Veratrine alkaloids, 122.
Veratrole, condensation of, with phenylsuccinic anhydride, in presence of aluminium chloride, 1414.
β-Veratroyl-α-phenylpropionic acid, and its methyl ester, and nitro-, 1415.
Vinylacetic acid, isotopic interchange of, in presence of deuterium oxide, 1742.
Vinylacrylic acid, γ-hydroxy-, lactone, 1145.
α-Vinylcinnamic acid, reduction of, and its ethyl ester, 717.
Vinyl groups, detection of, 1294.
Viscosimetry, use of the logarithmic head correction in, 1793.
Vitamin-*A*, synthesis of, 584.

W.

Walden inversion, 1525.
Water, association of, with deuterium oxide in dioxan solutions, 822.
heavy. See Deuterium oxide.
Wolffram's salt, nature of, 1244.

X.

Xanthines, methylated, potentiometric determination of dissociation constants of, 1376.
β-Xylidinocrotonoxylidides, 113.
l-Xylose, preparation of, 425.

Y.

Yeast, growth of, 202.

Z.

Zinc oxide, heat of adsorption of gases on, and on its mixtures with chromium sesquioxide, 1487.

FORMULA INDEX.

THE following index of organic compounds of known empirical formula is arranged according to Richter's system (see *Lexikon der Kohlenstoff-Verbindungen*).

The elements are given in the order C, H, O, N, Cl, Br, I, F, S, P, and the remainder alphabetically.

The compounds are arranged—

Firstly, in groups according to the number of carbon atoms (thus C_1 group, C_2 group, etc.).

Secondly, according to the number of other elements besides carbon contained in the molecule (thus 5 IV indicates that the molecule contains five carbon atoms and four other elements).

Thirdly, according to the nature of the elements present in the molecule (given in the above order).

Fourthly, according to the number of atoms of each single element (except carbon) present in the molecule.

Salts are placed with the compounds from which they are derived. The chlorides, bromides, iodides, and cyanides of quaternary ammonium bases, however, are registered as group-substances.

C_1 Group.

CH_3 Methyl, free, reactions of, 366.
CH_4 Methane, ignition of mixtures of, with air at reduced pressures, 1426.
CO Carbon monoxide, catalytic combustion of, 32; catalytic effect of hydrogen on flames of, 144; explosions of mixtures of, with oxygen, 160, 165.
CN Cyanogen, physical properties of, 1001; electric moment of, 855.
CCl_4 Carbon tetrachloride, molecular refraction and polarisation of, 728.

1 II

CHN Hydrocyanic acid, studies on, 674; auric and cupric salts, complex anions of, 100.
CH_2O Formaldehyde, liquid, preparation of, 338; vapour pressure of, 506.
CH_2N_2 Diazomethane, preparation of, 286.
CH_4O Methyl alcohol, reaction of, with hydrogen chloride, 596.
CH_5N Methylamine, photochemical decomposition of, 1612; thermal decomposition of, 929.
COS Carbonyl sulphide, kinetics of reaction of, with water, 1033.
CCl_4S Thiocarbonyl tetrachloride, constitution and reactions of, 679.

1 III

CH_3O_2N Nitromethane, condensation of, with halogeno-aldehydes, 1178.
CH_4O_3Se Methylselenonic acid, 904.

C_2 Group.

C_2H_4 Ethylene, vibration frequency of, 885; equilibrium of hydrogenation of, to ethane, 876; reactions of, with deuterium and with hydrogen at nickel surfaces, 1701.
C_2H_5 Ethyl, free, reactions of, 366.
C_2H_6 Ethane, equilibrium of formation of, from ethylene, 876; vibration frequency of, 885.

2 II

C_2H_2O Keten, Friedel–Crafts reaction with, 1873.
$C_2H_2O_4$ Oxalic acid, reaction of, with potassium permanganate, 1303; manganese salt, dihydrate, dissociation of, 321.
$C_2H_2N_2$ Iminoformylcarbylamine, reactions of, 674.
$C_2H_3O_3$ Acetyl peroxide, decomposition of, 207.
$C_2H_4O_2$ Acetic acid, esterification of, 1590; potassium salt, densities of aqueous solutions of, 626.
C_2H_9Sb Bisdimethylantimony, 371.
C_2H_7N Ethylamine, photochemical decomposition of, 1612.
$C_2O_2D_4$ Trideuteracetic deuteracid, 494.

2 III

$C_2HO_2Cl_3$ Trichloroacetic acid, and its hydrate, cryoscopy of, in benzene and in dioxan, 1432; esterification of, 1590.

2 IV

$C_2H_{10}N_2Cl_2Pt$ Di(methylamino) platinous chlorides, 1213.
$C_2H_{10}N_2Cl_4Pt$ Di(methylamino) platinic chlorides, 1213.
$C_2H_{10}N_2Br_2Pt$ Di(methylamino) platinous bromide, 1213.

C_3 Group.

C_3H_4O Acraldehyde, spectrum, fluorescence, and photochemical decomposition of, 1452; kinetics of thermal decomposition of, 1443.
$C_3H_4O_4$ Malonic acid, complex metallic salts, 168; complex formation between heavy-metal and sodium salts of, 1728.

3 IV

$C_3H_4O_2NCl_3$ *γγγ*-Trichloro-α-nitro-β-hydroxypropane, 1179.
$C_3H_4O_2NBr_3$ *γγγ*-Tribromo-α-nitro-β-hydroxypropane, 1179.
$C_3H_4ONCl_3$ *γγγ*-Trichloro-α-amino-β-hydroxypropane, and its salts, 1623.

C_4 Group.

$C_4H_4O_2$ Keten, dimeric, constitution of, 1751.
$C_4H_8O_2$ Acetylmethylcarbinol, rotatory dispersion of, 704.
*iso*Butyric acid, specific heats of aqueous mixtures of, 1166.
C_4H_9Cl *tert.*-Butylchloride, hydrolysis of, 255.
$C_4H_{10}S$ (−)β-Butylthiol, 1078.
$C_4H_{12}N_2$ *iso*Butylenediamine, 842.

4 III

$C_4H_{10}O_3S$ (+)β-Butanesulphonic acid, 1078.
$C_4H_{11}O_2Sb$ Diethylantimonic acid, 371.

4 IV

$C_4H_2O_4S_4Ni$ Nickelodithio-oxalic acid, potassium salt, 1479.
$C_4H_2O_4S_4Pd$ Palladodithio-oxalic acid, potassium salt, 1479.
$C_4H_2O_4S_4Pt$ Platinodithio-oxalic acid, potassium salt, 1479.
$C_4H_5O_2N_2S$ Thiovioluric acid, 468.
$C_4H_6ON_4S$ 4:5-Diamino-2-thiouracil, 469.
$C_4H_7O_2N_2Cl_3$ *γγγ*-Trichloro-γ-hydroxy-*n*-propylurea, 1623.
$C_4H_8ONBr_3$ γ-Bromo-α-aminobutyric acid hydrobromide, 766.
$C_4H_{10}NS_2Br$ Methylthioformaldin hydrobromide, 866.
$C_4H_{14}N_2Br_2Pt$ β-Di(ethylamino)platinous bromide, 1213.
$C_4H_{16}O_2N_2Pt$ Di(ethylamino)platinous hydroxide, salts of, 1213.

4 V

$C_4H_{12}O_4N_2S_2Pd$ Bis(dimethylsulphide)palladium dinitrite, 1559.

C_5 Group.

$C_5H_4O_2$ Protoanemonin, 1145.
C_5H_9N (+)β-Butyl cyanide, 1080.
$C_5H_{10}O$ *iso*Valeraldehyde, photochemical decomposition of, 1504.
$C_5H_{10}O_5$ *l*-Xylose, preparation of, 425.
$C_5H_{11}As$ Dimethylallylarsine, 398.

5 III

C_5H_3ON β-Hydroxy-α-methyl*iso*butylamines, and their hydrochlorides, 416.
$C_5H_6O_2Cl_2$ Glutaryl chloride, structure of, 856.
$C_5H_7O_3N$ Methyl α-cyanoethyl carbonate, 1060.
$C_5H_7N_2Cl$ 4(5)-Chloroethylglyoxaline, hydrochloride of, 491.
$C_5H_8ON_2$ 4(5)-β-Hydroxyethylglyoxaline, and its picrate, 490.
C_5H_9OCl (+)Methylethylacetyl chloride, 1080.
$C_5H_9O_2Cl$ *d*-β-Butyl chloroformate, 1079.
Methyl α-chloro*iso*butyrate, 1059.
$C_5H_9O_4N$ Ethyl nitroacetate nitronic ester, 7.
C_5H_9NS (+)β-Butyl thiocyanate, 1078.
C_5H_9NSe (−)β-Butyl selenocyanate, 1079.
$C_5H_{11}ON$ (+)Acetomethylethylamide, 1080.
$C_5H_{11}O_2N$ Valine, configuration of, 410.
$C_5H_{11}BrHg$ *dl*-Amylmercuric bromide, 40.
$C_5H_{11}IHg$ *n*-Amylmercuric iodide, 40.
$C_5H_{12}O_3N_4$ Canavanine, 763.
$C_5H_{13}ON$ *d*- and *l*-Valinols, and their salts, 414.
$C_5H_{13}NBr_2$ α-Bromomethyl*iso*butylamine hydrobromide, 414.

5 IV

$C_5H_5O_2NS$ 4-Methylthiazole-5-carboxylic acid, 1031.
C_5H_5NBrAu Pyridinobromogold, 218.
$C_5H_6O_4NCl_3$ *γγγ*-Trichloro-α-nitro-β-acetoxypropane, 1179.
$C_5H_6O_4NBr_3$ *γγγ*-Tribromo-α-nitro-β-acetoxypropane, 1179.
$C_5H_6ONCl_3$ *γγγ*-Trichloro-α-acetamido-β-hydroxypropane, 1623.

$C_5H_8ON_2S$ 4(5)-β-Hydroxyethyl-2-thiolglyoxaline, 490.
$C_5H_6O_3NCl_3$ γγδ-Trichloro-α-nitro-β-hydroxypentane, 1179.
$C_5H_{10}ONCl_3$ γγδ-Trichloro-α-amino-β-hydroxy-*n*-pentane, and its salts, 1624.
$C_5H_{13}Cl_2AsHg$ Dimethyl-*n*-propylarsine mercurichloride, 398.
Methyldiethylarsine mercurichloride, 398.
$C_5H_{13}Cl_4AsHg_2$ Dimethyl-*n*-propylarsine dimercurichloride, 397.
Methyldiethylarsine dimercurichloride, 398.

C_6 Group.

C_6H_6 Benzene, molecular refraction and polarisation of, 728; action of aromatic aldehydes on, in presence of aluminium chloride, 72; compounds of, with 2:4-dinitro-2′-methyldiphenyl-6-carboxylic acid, 1858.

6 II

$C_6H_6O_3$ Pyrogallol, action of, with hydrogen peroxide, catalysed by iron, 826.
$C_6H_6O_6$ Dimethylene tartrate, rotation of, 1038.
C_6H_7N Aniline, dielectric constant and density of, 776; surface tension and partial vapour pressure of aqueous solutions of, 776; velocity of reactions of, with 1-bromo- and 1-chloro-nitrobenzenes, 1411; addition of, to olefines, 1279.
$C_6H_8O_7$ Citric acid, anhydrous, crystallography of, 130.
$C_6H_{10}O_5$ 5-Methyl γ-arabonolactone, 653.
$C_6H_{10}N_4$ 4:5-Diamino-6-ethylpyrimidine, 1284.
$C_6H_{11}N_3$ 4(5)-β-Methylaminoethylglyoxaline, salts of, 491.
$C_6H_{12}O$ Methyl *n*-butyl ketone, photolysis of, 1638.
$C_6H_{12}O_6$ Glucose, transformation of, into galactose and gulose, 685.
$C_6H_{12}O_9$ Metacetaldehyde, preparation of, and its effect on rotation of ethyl tartrate, 904.
$C_6H_{14}O$ (−)Ethyl β-butyl ether, 1079.

6 III

$C_6H_5O_2N$ Nitrobenzene, electrical polarisation of concentrated solutions of, 609; polarisation of, in various solvents, 504.
$C_6H_6O_2N_2$ α-*o*-Nitroaniline, transformation of, into the β-form, 1860.
$C_6H_7O_3Cl$ 2-Chloro-Δ^1-*cyclo*pentenecarboxylic acid, 1540.
$C_6H_7O_4N_3$ 5-Nitro-6-ethyluracil, 1284.
$C_6H_5OBr_2$ 4:6-Dibromo-*m*-tolyl methyl ether, 1423.
$C_6H_9O_2N$ Nitroso*iso*propylacetone, photochemical decomposition of, 1679.
$C_6H_9O_3N_3$ *cyclo*Propane-1:1:2-tricarboxylamide, 193.
$C_6H_8O_6N$ Methyl nitromalonate nitronic ester, 8.
$C_6H_9N_4Cl$ 2-Chloro-4:5-diamino-6-ethylpyrimidine, 1284.
$C_6H_{10}O_4N_2$ *iso*Nitroso*cyclo*hexanone nitrite, 1273.
$C_6H_{12}NCl_3$ ββ′β″-Trichlorotriethylamine, 1217.
$C_6H_{14}Br_2Au_2$ *n*-Propyldibromogold, 222.
$C_6H_{14}Br_2Sn$ Di-*n*-propyltin dibromide, 41.
$C_6H_{14}IAs$ Trimethylallylarsonium iodide, 399.
$C_6H_{14}S_2Pd$ Palladium di-*n*-propylmercaptide, 1561.

6 IV

$C_6H_5O_2N_3Cl_2$ 2:4-Dichloro-5-nitro-6-ethylpyrimidine, 1284.
2:6-Dichloro-4-nitrophenylhydrazine, 1814.
$C_6H_5O_2N_3Br_2$ 2:6-Dibromo-4-nitrophenylhydrazine, 1814.
$C_6H_6O_2N_3Cl$ 2-Chloro-4-nitrophenylhydrazine, 92.
$C_6H_6O_2N_3Br$ 2-Bromo-4-nitrophenylhydrazine, 92.
$C_6H_7O_2NS$ Methyl 4-methylthiazole-5-carboxylate, 1031.
$C_6H_7O_2N_2Cl$ 4-Chloro-1:3-dimethyluracil, 956.
$C_6H_7O_2N_4Cl$ 2-Chloro-5-nitro-4-amino-6-ethylpyrimidine, 1284.
$C_6H_8ON_2S$ 6-Ethyl-2-thiouracil, 1284.
$C_6H_{11}O_2N_2Cl_3$ γγδ-Trichloro-β-hydroxy-*n*-amylurea, 1624.
$C_6H_{11}NSHg$ *n*-Amylmercuric thiocyanate, 40.
$C_6H_{14}O_6N_2Pb$ Di-*n*-propyl-lead dinitrate, 43.
$C_6H_{16}Cl_2S_2Pd$ Bis(methylethylsulphide)palladium dichloride, 1558.
$C_6H_{18}Cl_2As_2Pd$ Bis(trimethylarsine)palladium dichloride, 1560.

C_7 Group.

C_7H_7 Benzyl, free, preparation of, 381.
C_7H_8 Toluene, action of aromatic aldehydes on, in presence of aluminium chloride, 72.

7 II

C_7H_7Br Benzyl bromide, rate of reaction of, with nitrobenzylamine and its derivatives, 16; effect of substituents on reactions of, with α-picoline and pyridine, 519.
$C_7H_8O_6$ Methyl dihydrogen *cyclo*propane-1:1:2-tricarboxylate, 193.
$C_7H_{10}O_2$ 1-Methyl-Δ^2-*cyclo*pentene-1-carboxylic acid, 1536.
$C_7H_{10}O_3$ Keto-acid, from oxidation of dehydronorcaryophyllenic acid, 533.

$C_7H_{10}O_6$ Dimethyl methylenetartrate, 1043.
$C_7H_{11}Cl$ 1-Methyl-Δ^2-*cyclo*pentenylmethyl chloride, 1536.
$C_7H_{12}O$ 1-Methyl-Δ^2-*cyclo*pentenyl-1-carbinol, 1536.
$C_7H_{12}O_2$ *n*-Butyl acrylate, 404.
$C_7H_{12}O_3$ β-Methoxyethyl α-methylacrylate, 715.
$C_7H_{12}O_4$ Methyl α-acetoxy*iso*butyrate, 715.
$C_7H_{12}O_7$ α-Methylmannuronide, and its potassium salt, 518.
$C_7H_{13}N_3$ 4(5)-β-Dimethylaminoethylglyoxaline, and its salts, 491.
4(5)-β-Ethylaminoethylglyoxaline, salts of, 491.
$C_7H_{14}O$ Di-*n*-propylketone, photochemical decomposition of, 1504.
$C_7H_{14}O_6$ α-Methylaltroside, 1199.
4-Methylglucose, constitution of, 874.
α-Methylguloside, 689.
$C_7H_{15}I$ *tert.*-Heptyl iodide, 1282.
$C_7H_{16}O_3$ Ethyl orthoformate, parachor of, 207.

7 III

$C_7H_5O_3I$ 2-Iodo-3-hydroxybenzoic acid, 857.
$C_7H_6N_2Se$ 1-Aminobenzselenazole, 1764.
C_7H_6ClF Fluorobenzyl chlorides, 1817.
$C_7H_7O_3N$ 2-Nitrosomethoxyphenol, metallic salts, 1617.
$C_7H_8O_3N_2$ α-Cyanoethyl carbonate, 1059.
$C_7H_8O_8N$ 2′:4′-Dinitro-2-amino-4-methoxydiphenyl ether, 198.

7 IV

$C_7H_4OCl_4S$ 2-Chlorophenoxytrichloromethylthiol, 681.
C_7H_5ONSe 1-Hydroxybenzselenazole, 1765.
$C_7H_5OCl_3S$ *S*-Phenoxytrichloromethylthiol, 681.
$C_7H_5O_4NBr_2$ 2:4-Dibromo-6-nitroresorcinol 3-methyl ether, 947.
$C_7H_5O_4N_2Br$ 2:4-Dinitrobenzyl bromide, 1843.
C_7H_5NSSe 1-Thiolbenzselenazole, 1765.
$C_7H_6O_3NCl$ 3-Chloro-2-nitroso-5-methoxyphenol, metallic salts, 1617.
$C_7H_6O_3NBr$ 4-Bromo-3-nitroanisole, 947.
4-Bromo-6-nitro-*m*-cresol, 1423.
$C_7H_6O_4NBr$ 4-Bromo-6-nitroresorcinol 3-methyl ether, 947.
$C_7H_7ON_4Cl$ 2-Chloro-6-methoxy-7-methylpurine, 957.
$C_7H_8O_5NAs$ 3-Amino-4-carboxyphenylarsonic acid, 471.
$C_7H_8O_3N_2S$ 3-Nitroanilino-*N*-methylenesulphurous acid, sodium salt, 811.
$C_7H_8O_6N_2S$ Nitro-2-hydroxyanilino-*N*-methylenesulphurous acids, sodium salts, 809.
$C_7H_{10}O_3NCl_3$ γγγ-Trichloro-α-acetamido-β-acetoxypropane, 1623.
$C_7H_{10}O_4NCl_3$ γγδ-Trichloro-α-nitro-β-acetoxypentane, 1179.
$C_7H_{11}O_3NSe$ Substance, from selenium dioxide and aniline, 904.
$C_7H_{12}O_2NCl_3$ γγδ-Trichloro-α-acetamido-β-hydroxy-*n*-pentane, 1624.
$C_7H_{18}ONI$ β-Ethoxyethyltrimethylammonium iodide, 723.

7 V

C_7H_4ONClS 5-Chloro-1-hydroxybenzthiazole, 1760.
C_7H_4ONIS 5-Iodo-1-hydroxybenzthiazole, 1760.
$C_7H_8O_2NClPd$ Salicylaldoximepalladous chloride, 461.

C_8 Group.

C_8H_{14} *cis-* and *trans-bicyclo*Octanes, 442.

8 II

$C_8H_7N_5$ 3:4-Diamino-5-pyridylpyrazole, 420.
$C_8H_8O_3$ *r*-Mandelic acid, resolution of, with (—) ephedrine, 1544.
o-Piperonyl alcohol, 726.
$C_8H_8O_4$ (—)*o*-Hydroxymandelic acid, 111.
$C_8H_6O_7$ *l*-Diacetyltartaric anhydride, 846.
$C_8H_6Cl_2$ β-*p*-Chlorophenylethyl chloride, 1820.
$C_8H_{10}O_2$ *cyclo*Pentanone-2-β-propionolactone, 1543.
$C_8H_{10}O_4$ Δ^2-Tetrahydroterephthalic acids, configuration of, 1373.
$C_8H_{12}O$ *d-trans*-β-0:3:3-*bicyclo*Octanone, 1071.
$C_8H_{12}O_2$ *cyclo*Pentanol-2-β-propionic acid lactone, 1543.
$C_8H_{12}O_3$ 2:2-Dimethyl*cyclo*pentan-1-one-4-carboxylic acid, 1128.
*cyclo*Pentanone-2-β-propionic acid, 983.
$C_8H_{13}O_4$ Dehydronorcaryophyllenic acid, 533.
$C_8H_{13}Br$ β-Δ^1-*cyclo*Hexenylethyl bromide, 501.
$C_8H_{14}O$ ββ-Dimethyl*cyclo*hexanone, supposed isolation of second form of, 1063.
β-Δ^1-*cyclo*Hexenylethyl alcohol, 501.
β-*cyclo*Pentylpropionic acid, 984.
$C_8H_{14}O_6$ 4:6-Dimethyl δ-mannonolactone, 1016.

$C_6H_{16}O_6$ 3:6-Dimethyl glucose, 175.
4:6-Dimethyl mannose, 1015.
Methyl α-methylaltrosides, 1198.
$C_6H_{16}N_2$ 4(5)-β-Trimethylaminoethylglyoxaline, salts of, 491.
$C_6H_{18}O$ (−)β-Butyl *n*-butyl ether, 1079.
$C_6H_{18}S$ (−)β-Octylthiol, 1081.
$C_6H_{18}S_2$ (−)β-Butyl disulphide, 1078.
Methyl ethyl ketone bisethylmercaptol, 1557.
$C_6H_{18}Se_2$ (+)β-Butyl diselenide, 1079.
$C_6H_{20}Sb$ Bisdiethylantimony, 371.

8 III

$C_6H_4O_2Br_4$ 2:4:6-Tribromo-ω-3-bromotoluic acid, 71.
$C_6H_4NBr_3$ 2:4:6-Tribromo-*m*-toluonitrile, 70.
$C_6H_5O_2Br_3$ 2:4:6-Tribromo-*m*-toluic acid, 71.
$C_6H_5O_4N_5$ 3:4-Dinitro-5-pyridylpyrazole, and its hydrochloride, 419.
$C_6H_5NCl_2$ 2-Chloro-ω-4-chlorotoluonitrile, 70.
$C_6H_6O_2N_2$ Substance, from *N*-nitrosophenylglycine and acetic anhydride, 899.
$C_6H_6O_2N_4$ 4-Nitro-5-pyridylpyrazole, 419.
$C_6H_6O_3Br_2$ 2:3-Dibromo-5:6-methylenedioxybenzyl alcohol, 725.
$C_6H_7O_2N$ Dioxindoles, optically active, 108.
$C_6H_7O_3N_5$ 4-Nitro-3-amino-5-pyridylpyrazole, and its salts, 419.
$C_6H_7O_3N$ *N*-Hydroxydioxindoles, optically active, 110.
$C_6H_7O_5N_5$ 4-Nitro-3-hydroxylamino-5-pyridylpyrazole, 419.
$C_6H_7O_5N$ (+)- and (−)-*o*-Nitromandelic acids, 108.
$C_6H_8O_2Br_2$ 4:6-Dibromoresorcinol dimethyl ether, 948.
$C_6H_8N_2Se$ 1-Imino-2-methyl-1:2-dihydrobenzselenazole, 1764.
1-Methylaminobenzselenazole, 1764.
C_6H_6ClBr β-*p*-Bromophenylethyl chloride, 1820.
C_6H_6ClI β-*p*-Iodophenylethyl chloride, 1820.
C_6H_6ClF β-*p*-Fluorophenylethyl chloride, 1821.
C_6H_6OCl β-*p*-Chlorophenylethyl alcohol, 1820.
C_6H_9OI β-*p*-Iodophenylethyl alcohol, 1820.
C_6H_9ONa Sodium *m*-4-xylyloxide, action of, with alkyl iodides in ethyl alcohol, 141.
$C_6H_9O_2N$ *aci*-Phenylnitromethane methyl ether, 6.
$C_6H_9O_3N$ *r*- and (+)-*o*-Aminomandelic acids, 107.
$C_6H_{10}O_2N_4$ 2:6-Dimethoxy-7-methylpurine, 957.
$C_6H_{10}N_2Se$ *s*-Phenylmethylselenourea, 1764.
$C_6H_{11}O_2Cl$ Ethyl 2-chloro-Δ^1-*cyclo*pentene-1-carboxylate, 1540.
$C_6H_{11}N_2Cl$ Phenylmethylformamidine hydrochloride, 678.
$C_6H_{12}O_2Br_2$ 1:2-Dibromo-3-methyl*cyclo*hexanecarboxylic acid, 264.
$C_6H_{13}ON_3$ 1-Acetyl*cyclo*pentene semicarbazone, 1288.
$C_6H_{13}OCl$ *cyclo*Pentanepropionyl chloride, 1069.
$C_6H_{13}O_2N$ Retronecine, and its salts, 13.
$C_6H_{13}O_2Br$ Bromo-3-methyl*cyclo*hexanecarboxylic acids, 266.
$C_6H_{13}O_4N$ *N*-Acetyl-α-acetoxy*iso*butyramide, 716.
$C_6H_{14}N_2Au_2$ Di-*n*-propyldicyanodigold, 1030.
$C_6H_{15}O_2N_3$ *dl*-1-Methyl*cyclo*hexan-1-ol-2-one semicarbazone, 1272.
$C_6H_{17}ON$ β-Nitroso-βε-dimethylhexane, photochemical decomposition of, 1679.
$C_6H_{17}O_4N$ 4:6-Dimethylmannonamide, 1016.
$C_6H_{18}N_4Au_2$ Ethylenediaminodiethylgold aurocyanide, 1029.
$C_6H_{18}Cl_2Pb$ Di-*n*-butyl-lead dichloride, 41.
$C_6H_{18}S_2Hg$ Mercury di-*n*-butylmercaptide, 1562.
$C_6H_{18}S_2Pd$ Palladium di-*n*-butylmercaptide, 1561.

8 IV

$C_6H_4O_2N_4S$ Thioltrihydroxybispyrimidazine, 469.
$C_6H_4O_6N_2Cl_2$ 2-Chloro-3:5-dinitro-ω-4-chlorotoluic acid, 70.
$C_6H_5ONCl_4$ 2:3:4:5-Tetrachloroacetanilide, 1006.
$C_6H_5ONBr_4$ 3:4:5:6-Tetrabromoacetanilide, 1006.
$C_6H_5ONBr_3$ 2:4:6-Tribromo-*m*-toluonitrile, 70.
$C_6H_5O_3N_3S$ 5-Nitro-1-keto-2-methyl-1:2-dihydrobenzthiazole, 1761.
$C_6H_5O_3N_4S$ 5-Nitro-1-nitrosoimino-2-methyl-1:2-dihydrobenzthiazole, 1761.
C_6H_6NBrS 2-Bromo-*p*-tolylthiocarbimide, 1759.
C_6H_7ONS 1-Hydroxy-5-methylbenzthiazole, and its salts, 1758.
1-Methoxybenzthiazole, 1760.
C_6H_7ONSe 1-Keto-2-methyl-1:2-dihydrobenzselenazole, 1765.
$C_6H_7ON_2Se$ 1-Nitrosoimino-2-methyl-1:2-dihydrobenzselenazole, 1764.
$C_6H_7OCl_3S$ *S*-*p*-Tolyloxytrichloromethylthiol, 681.
C_6H_7NSSe 1-Thio-2-methyl-1:2-dihydrobenzselenazole, 1766.
$C_6H_8ON_2Br_2$ 4:6-Dibromo-*m*-tolylurea, 1620.
$C_6H_8O_2NBr$ *aci*-*p*-Bromophenylnitromethane methyl ether, 5.
$C_6H_8O_3NBr$ Bromonitro-*m*-tolyl methyl ethers, 1423.
C_6H_9ONS Methyl phenylthioncarbamate, 1760.

$C_9H_9ON_2Br$ 6-Bromo-*m*-tolylurea, 1620.
$C_9H_9O_3NS$ *p*-Toluenesulphonylnitromethane, 8.
$C_9H_{10}ONBr$ 4-Bromo-5-methoxytoluidines, 1423.
$C_9H_{10}O_6N_2S_2$ 3-Nitroanilino-*NN*-dimethylenesulphurous acid, disodium salt, 811.
$C_9H_{10}O_9N_2S_2$ Nitro-2-hydroxyanilino-*NN*-dimethylenesulphurous acids, sodium salts, 809.
$C_9H_{18}O_6N_2Pb$ Di-*n*-butyl-lead dinitrate, 43.
$C_9H_{22}N_2Br_4Au_2$ Ethylenediaminodi-*n*-propyldibromogold, 222.
$C_9H_{28}N_4Cl_5Pt_2$ Chlorotetra(ethylamino)platinous chloroplatinite, 1250.
$C_9H_{28}N_4Br_2Pt$ Bromotetra(ethylamino)platinum bromide, 1249.

8 V

C_9H_9ONClS 5-Chloro-1-keto-2-methyl-1:2-dihydrobenzthiazole, 1760.
C_9H_9ONBrS Bromohydroxy-5-methylbenzthiazoles, 1759.
5-Bromo-1-methoxybenzthiazole, 1760.
C_9H_9ONIS 5-Iodo-1-keto-2-methyl-1:2-dihydrobenzthiazole, 1760.
$C_9H_8ON_2ClS$ 5-Chloro-1-nitrosoimino-2-methyl-1:2-dihydrobenzthiazole, 1761.
$C_9H_8ON_2IS$ 5-Iodo-1-nitrosoimino-2-methyl-1:2-dihydrobenzthiazole, 1760.
C_9H_8ONBrS Methyl *p*-bromophenylthioncarbonate, 1760.
$C_9H_{10}ON_4ClI$ 2-Chloro-1:7-dimethylhypoxanthine methiodide, 957.
$C_9H_{20}O_4N_2S_2Pd$ Bis(diethylsulphide)palladium dinitrite, 1359.

C_9 Group.

C_9H_{16} *l-trans*-Hydrindane, 1071.

9 II

$C_9H_{10}O_2$ 2-Allylresorcinol, 631.
$C_9H_{10}O_3$ Methyl α-carbomethoxyethyl carbonate, 1060.
$C_9H_{11}Cl$ (−)β-Chloro-α-phenylpropane, 1084.
$C_9H_{11}Br$ (+)β-Bromo-α-phenylpropane, 1084.
2:4-Dimethylbenzyl bromide, 1844.
p-Ethylbenzyl bromide, 1843.
$C_9H_{12}O_2$ 2-Propylresorcinol, 632.
$C_9H_{12}O_3$ *m*-(β-Hydroxyethoxy) anisole, 1099.
$C_9H_{12}O_4$ 2:2-Dimethyl*cyclo*pentanone-5-glyoxylic acid, 454.
*cyclo*Pentanol-1:2-diacetolactone, 440.
$C_9H_{12}O_6$ Methyl Δ^{β}-propylene-αα'β-tricarboxylate, reactions of, 188.
$C_9H_{12}O_8$ *n*-Pentane-αβγε-tetracarboxylic acid, and its barium salt, 193.
$C_9H_{12}S$ (−)α-Phenyl-β-propylthiol, 1083.
$C_9H_{13}N$ (+)β-Amino-α-phenylpropane, 1083.
m-Propylaniline, 308.
$C_9H_{14}O$ *d*- and *l-trans*-β-Hydrindanones, 1070.
$C_9H_{14}O_2$ Ethyl 1-methyl-Δ^3-*cyclo*pentene-1-carboxylate, 1536.
$C_9H_{14}O_4$ 1-Methyl*cyclo*pentane-1-carboxy-2-acetic acid, 1068.
Methyl *cyclo*pentane-1:2-dicarboxylates, 1484.
d- and *l-trans-cyclo*-Pentane-1:2-diacetic acids, 1071.
$C_9H_{14}O_6$ β-Methylpentane-ββδε-tricarboxylic acid, 1128.
$C_9H_{14}O_7$ α-Carbomethoxyethyl carbonate, 1059.
$C_9H_{16}O_4$ *n*-Butyl α-acetoxypropionate, 404.
$C_9H_{16}O_5$ β-Methoxyethyl α-acetoxy*iso*butyrate, 715.
$C_9H_{17}N$ 2-Methyloctahydropyrrocoline, and its salts, 1745.
Norlupinane, 1744.
$C_9H_{18}O_6$ 3:6-Dimethyl β-methylglucoside, 176.
4:6-Dimethyl α-methylmannopyranoside, 1015.
$C_9H_{19}N$ *N*-β-Butylpiperidines, 1077.
$C_9H_{20}S$ (−)Methyl β-octyl sulphide, 1081.

9 III

$C_9H_7O_2N$ Isatin methyl ethers, 1656.
$C_9H_7O_3N$ 8-Amino-7-hydroxycoumarin, 815.
$C_9H_7O_4I$ 2-Iodo-3-acetoxybenzoic acid, 857.
$C_9H_8O_2N_2$ Substance, from *N*-nitroso-α-anilinopropionic acid and acetic anhydride, 900.
C_9H_9ON (−)Phenylmethoxyacetonitrile, 194.
$C_9H_9O_3N$ *r-o*-Nitrophenylmethoxyacetic acid, 107.
$C_9H_{10}OBr_2$ *p*-Bromophenyl γ-bromopropyl ether, 1834.
$C_9H_{10}O_3N_2$ *N*-Nitroso-α-anilinopropionic acid, 900.
$C_9H_{10}O_3S$ 2-Carboxyphenyl β-hydroxyethyl sulphide, 1237.
$C_9H_{10}O_4N_2$ 6-Hydroxy-2:4-dimethylpyridine-3:5-dicarboxylic monoamide, 539.
$C_9H_{10}O_4S$ 2-Carboxyphenyl β-hydroxyethyl sulphoxide, 1237.
$C_9H_{10}O_5S$ 2-Carboxyphenyl-β-hydroxyethylsulphone, 1237.
$C_9H_{11}ON_3$ δ-Amino-αγ-dicyano-ββ-dimethylvaleric acid lactam, 539.
$C_9H_{11}OCl$ *o*-Chlorophenyl propyl ethers, 1834.
$C_9H_{11}O_2N$ Ethyl pyridyl-2-acetate, 1744.
$C_9H_{11}O_2N_3$ *m*-Hydroxyacetophenone semicarbazone, 302.

$C_9H_{12}O_2N_2$ Nitropropylanilines, 308.
$C_9H_{12}O_3N_2$ α-Cyano*iso*propyl carbonate, 1060.
$C_9H_{13}O_2N$ 1-Cyano*cyclo*hexyl acetate, 406.
$C_9H_{13}O_6Br$ Methyl β-bromo-*n*-propane-ααβ-tricarboxylate, 192.
$C_9H_{15}ON$ 3-Keto-2-methyloctahydropyrrocoline, 1745.
3-Keto-octahydropyridocoline, 1744.
$C_9H_{15}ON_3$ *d-trans*-β-0:3:3-*bicyclo*Octanone semicarbazone, 1071.
$C_9H_{15}O_2Br$ Ethyl bromo*cyclo*hexanecarboxylates, 263.
$C_9H_{17}ON$ 3-Hydroxy-2-methyloctahydropyrrocoline, and its salts, 1745.
$C_9H_{17}O_2N$ Ethyl piperidyl-2-acetate, 1744.
$C_9H_{17}O_3N$ Ethyl α-acetamido*iso*valerate, 415.
$C_9H_{17}NS$ (—)β-Octyl thiocyanate, 1081.

9 IV

$C_9H_6O_2NBr$ 6-Bromohomopiperonylonitrile, 667.
$C_9H_8ON_2Se$ 1-Acetamidobenzselenazole, 1764.
$C_9H_8O_3NBr$ 6-Bromohomopiperonylamide, 667.
C_9H_9ONS 1-Keto-2:5-dimethyl-1:2-dihydrobenzthiazole, 1758.
1-Methoxy-5-methylbenzthiazole, 1758.
$C_9H_9ON_2S$ 1-Nitrosoimino-2:5-dimethyl-1:2-dihydrobenzthiazole, 1758.
$C_9H_9O_2NS$ 1-Hydroxy-5-ethoxybenzthiazole, 1760.
$C_9H_9O_5N_2As$ Carboxymethylbenziminazole-5-arsonic acid, 156.
$C_9H_{10}ON_2Se$ *s*-Acetylphenylselenourea, 1764.
$C_9H_{10}O_6N_2As$ Carbamylmethylbenziminazole-5-arsonic acid, 156.
$C_9H_{11}ONS$ Methyl *p*-tolylthioncarbamate, 1758.
$C_9H_{11}O_4NS$ *p*-Toluenesulphonylnitromethane nitronic methyl ester, 9.
$C_9H_{13}O_7N_2I$ Iodo-3-nitro-4-hydroxyphenyltrimethylammonium hydroxide, salts of, 116.
$C_9H_{14}O_2NCl_3$ γγδ-Trichloro-α-acetamido-β-acetoxy-*n*-pentane, 1624.
$C_9H_{20}ONI$ *dl-cyclo*Hexan-1-ol-2-trimethylammonium iodide, 1273.

9 V

$C_9H_3ON_2Cl_2Br_5$ ββω-Tribromo-α-ketopropaldehyde 3:5-dichloro-2:4-dibromophenylhydrazone, 1008.
C_9H_8ONClS 5-Chloro-1-ethoxybenzthiazole, 1760.
C_9H_8ONBrS Bromo-1-keto-2:5-dimethyl-1:2-dihydrobenzthiazoles, 1759.
C_9H_8ONIS 5-Iodo-1-ethoxybenzthiazole, 1760.
$C_9H_{10}ONIS$ *p*-Iodophenylthiourethane, 1760.

C_{10} Group.

$C_{10}H_{10}$ α-Phenylbutadiene, polymerisation of, 1359.
$C_{10}H_{14}$ *p*-Cymene, dipole moment of, 481.
$C_{10}H_{18}$ 8-Methylhydrindane, 738.
$C_{10}D_8$ Octadeuteronaphthalene, 1325.

10 II

$C_{10}H_6O_6$ Daphnetin-3-carboxylic acid, 816.
$C_{10}H_8O_3$ *m*-Methoxyphenylpropiolic acid, 1604.
$C_{10}H_{10}O$ 2-Methylchromene, 648.
$C_{10}H_{10}O_2$ Benzyl acrylate, 405.
$C_{10}H_{10}O_3$ *m*-Methoxy*allo*cinnamic acid, 1604.
$C_{10}H_{10}O_4$ 6-Methylhomopiperonylic acid, 666.
$C_{10}H_{11}N$ (—)β-Cyano-α-phenylpropane, 1083.
m-Propylbenzonitrite, 308.
$C_{10}H_{12}O_2$ *o*-Hydroxybenzylacetone, reactions of, 646.
4-Hydroxy-2-ethylacetophenone, 302.
2-Methylchroman, 648.
$C_{10}H_{12}O_3$ *r*-*p*-Tolylmethylglycollic acid, resolution of, 154.
$C_{10}H_{12}O_4$ 2-Hydroxy-4-(β-hydroxyethoxy)acetophenone, 1098.
$C_{10}H_{12}O_8$ *cyclo*Hexane-1:2:4:5-tetracarboxylic acid, 192.
$C_{10}H_{12}Cl_2$ Dichloro-2:4-diketo-8-methylhydrindane, 738.
$C_{10}H_{13}Br$ *p-iso*Propylbenzyl bromide, 1844.
$C_{10}H_{14}O$ 3:4-Diethylphenol, 302.
(—)Phenyl β-butyl ether, 1079.
$C_{10}H_{14}O_2$ 2:4-Diketo-8-methylhydrindane, 737.
γ-*m*-Methoxyphenyl-*n*-propyl alcohol, 435, 1289.
$C_{10}H_{14}O_3$ 2-Hydroxy-4-(β-hydroxyethoxy)ethylbenzene, 1099.
$C_{10}H_{14}O_6$ 1-Carboxy*cyclo*pentane-2-succinic acid, 476.
$C_{10}H_{14}S$ Phenyl *n*- and *iso*-butyl sulphides, 1556.
$C_{10}H_{16}O$ *dl*-Piperitone, synthesis of, 1585.
$C_{10}H_{16}O_2$ γ-Δ^2-*cyclo*Hexenylbutyric acid, 1638.
$C_{10}H_{16}O_3$ Ethyl 2:2-dimethyl*cyclo*pentan-1-one-4-carboxylate, 1128.
$C_{10}H_{16}O_4$ 2-Carboxy-1-methyl*cyclo*hexane-1-acetic acid, 737.
d- and *l-trans-cyclo*Hexane-1:2-diacetic acids, and their salts, 1070.
Homoapofenchocamphoric acid, 1129.

$C_{10}H_{16}O_6$ Retronecic acid, 14.
$C_{10}H_{16}O_7$ α-Methylmannuronide acetone, potassium salt, 517.
$C_{10}H_{16}O$ Carvomenthone, rotatory dispersion of, 709.
Menthone, rotatory dispersion of, 709.
$C_{10}H_{18}O_2$ Ethyl *cyclo*pentanepropionate, 1069.
$C_{10}H_{18}O_6$ Acetone α-methylguloside, 688.
1:2:3:4-Diethylidenesorbitol, 426.
α-Methylgalactopyranoside acetone, 1019.
β-Methylmannopyranoside 2:3-acetone, 1018.
α-Methylmannoside 2:3-acetone, 517.
$C_{10}H_{18}O_7$ 2:3:4-Trimethyl α-methyl-*d*-mannuronide, 518.
$C_{10}H_{20}O$ Carvomenthols, 1138.
$C_{10}H_{22}S$ Di-*n*-amyl sulphoxide, 1556.
(−)Ethyl β-octyl sulphide, 1081.
$C_{10}H_{22}Cd$ Di-*n*- and -*dl*-amylcadmium, 44.
$C_{10}H_{22}Hg$ Di-*n*-amylmercury, 40.
$C_{10}H_{24}Pb$ Dimethyldi-*n*-butyl-lead, 42.
$C_{10}H_{24}Sn$ Methyltri-*n*-propyltin, 41.

10 III

$C_{10}H_5O_2Cl$ 4-Chloro-1:2-naphthaquinone, 1853.
$C_{10}H_5O_2I$ 2-Iodo-1:4-naphthaquinone, 1853.
$C_{10}H_5O_3N_3$ 2-Nitro-4-diazonaphthalene 1-oxide, 673.
$C_{10}H_7O_5N_3$ 2:3-Dinitro-4-amino-1-naphthol, 673.
$C_{10}H_8O_2N_2$ Nitronaphthylamines, action of bromine on, 1596.
$C_{10}H_8O_3N_2$ 2-Nitro-4-amino-α-naphthol, and its hydrochloride, 673.
5-Nitro-8-quinolylmethyl alcohol, 1424.
$C_{10}H_8O_3I_2$ αβ-Di-iodo-*m*-methoxycinnamic acid, 1604.
$C_{10}H_8NCl$ 4-Chloro-2-naphthylamine, 1851.
$C_{10}H_8NBr$ 3-Bromo-2-naphthylamine, 1595.
$C_{10}H_8NI$ 4-Iodo-2-naphthylamine, 1851.
$C_{10}H_8N_2S$ 3-Methyl-4:5-thionaphthenopyrazole, 473.
$C_{10}H_9ON$ 8-Quinolylmethyl alcohol, 1424.
$C_{10}H_9O_2N$ 3-Hydroxy-2-methoxyquinoline, 1657.
$C_{10}H_9O_3Br$ Bromomethoxy*allo*cinnamic acids, 1604.
$C_{10}H_9O_3Br_3$ αβ-Dibromo-β-6-bromo-3-methoxyphenylpropionic acid, 1603.
$C_{10}H_9O_4Br$ Methyl 6-bromohomopiperonylate, 667.
$C_{10}H_9O_6N$ *r*- and (+)-*o*-Nitroacetylmandelic acids, 107.
$C_{10}H_9NS$ Cinnamyl thiocyanates, 1362.
$C_{10}H_9N_2Cl$ Chloronaphthylenediamines, and their salts, 1852.
$C_{10}H_9N_2Br$ 3-Bromo-1:2-naphthylenediamine, 1595.
Bromonaphthylenediamines, and their salts, 1852.
$C_{10}H_9N_2I$ Iodonaphthylenediamines, and their salts, 1852.
$C_{10}H_{10}O_3Br_2$ αβ-Dibromo-β-3-methoxyphenylpropionic acid, 1603.
$C_{10}H_{10}O_4N$ 2-Hydroxy-3- and -5-methoxybenzylideneglycine, barium salts, 214.
$C_{10}H_{11}O_4N$ (−)*o*-Acetamidomandelic acid, 109.
$C_{10}H_{11}O_5N$ Ethyl (+)*o*-nitromandelate, 108.
$C_{10}H_{11}NS$ γ-Phenylpropyl thiocyanate, 1362.
(−)β-Thiocyano-α-phenylpropane, 1083.
$C_{10}H_{12}O_3N_2$ Nitroso-α-anilino*iso*butyric acid, 900.
$C_{10}H_{13}ON$ β-Phenyl-α-methylpropionamide, 424.
$C_{10}H_{13}OCl$ *o*-Chlorophenyl *n*-butyl ether, 1834.
γ-*m*-Methoxyphenyl-*n*-propyl chloride, 435.
$C_{10}H_{13}O_2N$ Ethyl pyridyl-2-β-propionate, 1744.
$C_{10}H_{13}O_4N$ 2-Hydroxy-4-(β-hydroxyethoxy)acetophenone oxime, 1099.
$C_{10}H_{14}O_3N_2$ 2-Hydroxy-4-(β-hydroxyethoxy)acetophenone hydrazone, 1099.
$C_{10}H_{14}O_4Cu$ Copper acetylacetonate, 733.
$C_{10}H_{15}O_2N$ 1-Carbethoxy*cyclo*pentane-2-acetonitrile, 475.
$C_{10}H_{15}O_2N_3$ Ethyl *bicyclo*octan-1-one-2:3-dicarboxylate semicarbazone, 476.
$C_{10}H_{17}ON_3$ *trans-cyclo*Hexane-1:2-diacetic acid semicarbazones, 1070.
$C_{10}H_{17}O_2N$ Acetylretronecanol, picrate of, 14.
$C_{10}H_{18}O_7S$ α-Carbethoxyethyl sulphite, 1061.
$C_{10}H_{18}N_2Cl_2$ *p*-Aminobenzyltrimethylammonium chloride hydrochloride, 872.
$C_{10}H_{32}N_4Au_2$ Ethylenediaminodi-*n*-propylgold aurocyanide, 1029.
$C_{10}H_{22}Cl_2Pb$ Di-*n*-amyl-lead dichloride, 42.
$C_{10}H_{22}Br_2Pb$ Di-*n*-amyl-lead dibromide, 42.
$C_{10}H_{22}S_2Hg$ Mercury di-*n*-amylmercaptide, 1562.
$C_{10}H_{22}S_2Pd$ Palladium di-*n*-amylmercaptide, 1562.

10 IV

$C_{10}H_4O_3NCl$ 1-Chloro-3-nitronaphthalene, 1851.
$C_{10}H_4O_2NBr_5$ 2:3:4:5:6-Pentabromodiacetanilide, 1006.
$C_{10}H_4O_3NCl$ 4-Chloro-2-nitro-1-naphthol, 673.
$C_{10}H_4O_3NBr$ 3-Bromo-1-nitro-2-naphthol, 1595.

$C_{10}H_4O_3NI$ 2-Iodo-4-nitro-1-naphthol, 1853.
$C_{10}H_6O_4N_3Br$ 3-Bromo-1:6-dinitro-2-naphthylamine, 1596.
$C_{10}H_7O_3N_2Cl$ 4-Chloro-2-nitro-1-naphthylamine, 1850.
$C_{10}H_7O_2N_2Cl_5$ Ethyl α-chloroglyoxylate 2:3:4:5-tetrachlorophenylhydrazone, 1008.
$C_{10}H_7O_2N_2Br$ 3-Bromo-6-nitro-8-methylquinoline, 1424.
3-Bromo-1-nitro-2-naphthylamine, 1595.
$C_{10}H_7O_3N_2Cl$ 3-Chloro-2-nitro-4-amino-1-naphthol, and its hydrochloride, 674.
$C_{10}H_7O_3N_2Br$ 3-Bromo-2-nitro-4-amino-1-naphthol, 674.
$C_{10}H_7O_3N_2I$ 3-Iodo-2-nitro-4-amino-1-naphthol, 674.
$C_{10}H_5O_2N_2Br_4$ Ethyl α-bromoglyoxylate 3:4:5-tribromophenylhydrazone, 1008.
$C_{10}H_8O_2N_2S$ 3-Methyl-4:5-thionaphthenopyrazole dioxide, 473.
$C_{10}H_9O_2NBr_2$ 3:5-Dibromodiacetanilide, 1006.
$C_{10}H_9O_2NS$ 1-Acetoxy-5-methylbenzthiazole, 1759.
$C_{10}H_9O_2N_2Cl_4$ Ethyl α-aminoglyoxylate tetrachlorophenylhydrazone, 1008.
$C_{10}H_{10}ON_4S$ 11-Thiol-13-hydroxy-3:4:5:6-tetrahydrobenzpyrimidazine, 469.
$C_{10}H_{11}ONS$ 1-Ethoxy-5-methylbenzthiazole, 1758.
$C_{10}H_{11}ON_2Cl$ β-Aminocrotono-*m*-chloroanilide, 114.
$C_{10}H_{11}O_2NS$ 1-Keto-5-ethoxy-2-methyl-1:2-dihydrobenzthiazole, 1760.
1-Methoxy-5-ethoxybenzthiazole, 1760.
$C_{10}H_{12}O_2NBr$ Acetyl-2-bromo-5-methoxy-*p*-toluidine, 1423.
$C_{10}H_{12}N_2Cl_4Fe$ Pyridinium ferrochloride, 116.
$C_{10}H_{12}N_2Br_4Fe$ Pyridinium ferrobromide, 116.
$C_{10}H_{13}O_2NS$ Methyl *p*-phenetylthioncarbamate, 1760.
$C_{10}H_{13}O_5NS_2$ 2-Hydroxy-5-carbomethoxyanilino-*NN*-dimethylenesulphurous acid, 810.
$C_{10}H_{14}OClI$ 3-Chloro-10-iodocamphor, 536.
$C_{10}H_{14}OCl_2Hg$ 3-Chlorocamphor 10-mercurichloride, 536.
$C_{10}H_{14}OBrI$ 3-Bromo-10-iodocamphor, 536.
$C_{10}H_{14}OBr_2Hg$ 3-Bromocamphor 10-mercuribromide, 536.
$C_{10}H_{15}O_3ClS$ 3-Chlorocamphorsulphinic acids, 536.
$C_{10}H_{15}O_3BrS$ 3-Bromocamphorsulphinic acids, 536.
$C_{10}H_{15}O_4N_2Cl_3$ γγδ-Trichloro-β-acetoxy-*n*-amylacetylurea, 1624.
$C_{10}H_{22}O_4SHg_2$ *dl*-Amylmercuric sulphate, 40.
$C_{10}H_{22}O_4SPb$ Di-*n*-amyl-lead sulphate, 42.
$C_{10}H_{22}O_6N_2Pb$ Di-*n*-amyl-lead dinitrate, 43.

10 V

$C_{10}H_3O_2N_2Cl_2Br_3$ Ethyl α-bromoglyoxylate 3:5-dichloro-4-bromophenylhydrazone, 1008.
$C_{10}H_{10}ONBrS$ Bromo-1-ethoxy-5-methylbenzthiazole, 1759.
$C_{10}H_{10}O_2N_2Cl_2Br$ Ethyl α-aminoglyoxylate 3:5-dichloro-4-bromophenylhydrazone, 1008.
$C_{10}H_{12}ONBrS$ Bromo-*p*-tolylthiourethanes, 1759.
$C_{10}H_{14}OClBrHg$ 3-Bromocamphor 10-mercurichloride, 536.
3-Chlorocamphor 10-mercuribromide, 536.
$C_{10}H_{14}OClIHg$ 3-Chlorocamphor 10-mercuri-iodide, 536.
$C_{10}H_{14}OBrIHg$ 3-Bromocamphor 10-mercuri-iodide, 536.
$C_{10}H_{36}O_2N_4Cl_2Pt$ α-Di(ethylamino)di(propylamino)platinous chloride dihydrate, 1248.

C_{11} Group.

$C_{11}H_{12}$ 1-Methyl-3:4-dihydronaphthalene, 1543.

11 II

$C_{11}H_8O_4$ 7-Hydroxy-8-acetylcoumarin, 815.
Methylnaphthazarin, 333.
$C_{11}H_8O_5$ Hydroxydroserone, 338.
$C_{11}H_{10}O$ 2:3-Dimethylindenone, 1161.
$C_{11}H_{10}O_2$ α-Vinylcinnamic acid, reduction of, 717.
$C_{11}H_{10}O_4$ Methyl 3:4-methylenedioxycinnamate, 1413.
$C_{11}H_{12}O_2$ α-Benzyl-γ-butyrolactone, 724.
iso-α-Benzylcrotonic acid, and its silver salt, 725.
β-Phenyl-β-vinylpropionic acid, 1364.
$C_{11}H_{12}O_3$ 3-Allylresacetophenone, 631.
4-*O*-Allylresacetophenone, 630.
$C_{11}H_{12}O_4$ Methyl β-3:4-methylenedioxyphenylpropionate, 1413.
$C_{11}H_{14}O_2$ *m*-Methoxybenzylacetone, 433.
2-Methoxy-2-methylchroman, 648.
$C_{11}H_{14}O_3$ γ-*m*-Methoxyphenylbutyric acid, 1290.
Methyl β-*m*-methoxyphenylpropionate, 435, 1413.
3-*n*-Propylresacetophenone, 632.
$C_{11}H_{14}O_4$ *m*-(β-Acetoxyethoxy)anisole, 1099.
$C_{11}H_{15}Br$ *p-tert.*-Butylbenzyl bromide, 1844.
$C_{11}H_{16}O$ 3:4-Diethylanisole, 303.
trans-3-Methyl-Δ^2-octal-1-one, 1068.
$C_{11}H_{16}O_4$ Ethyl 2:2-dimethyl*cyclo*pentanone-5-glyoxylate, 454.
β-(Δ^1-*cyclo*Hexenylethyl)malonic acid, 1638.

$C_{11}H_{17}N$ *p-tert.*-Butylbenzylamine, 1848.
(—)β-Butyl-*p*-toluidine, 1078.
$C_{11}H_{17}P$ Mesityldimethylphosphine, 464.
$C_{11}H_{18}O$ *trans*-3-Methyl-α-decalone, 1068.
$C_{11}H_{18}O_2$ Δ^{10}-Undecynoic acid, addition of hydrogen bromide to, 1572.
$C_{11}H_{18}O_6$ 4:6-Dimethyl δ-mannonolactone 2:3-acetone, 1016.
$C_{11}H_{18}O_7$ α-Carbomethoxy*iso*propyl carbonate, 1059.
$C_{11}H_{20}O_2$ Undecenoic acid, addition of hydrogen bromide to, 1572.
$C_{11}H_{20}O_3$ 10:11-Epoxyundecoic acid, addition of hydrogen bromide to, 1575.
$C_{11}H_{20}O_6$ 4:6-Dimethyl mannose 2:3-acetone, 1016.
$C_{11}H_{20}O_7$ 2:3:4-Trimethyl-α-methylmannuronide methyl ester, 518.
$C_{11}H_{22}O_6$ Tetramethyl α-methylaltroside, 1199.

11 III

$C_{11}H_5O_6N_3$ 4:5-Dinitronaphthastyril, 318.
$C_{11}H_6O_4S$ Naphthalene-1:8-carboxysulphonic anhydride, 318.
$C_{11}H_6N_2Se$ 1-Amino-α-naphthaselenazole, 1766.
$C_{11}H_7O_4N$ 8-Acetamido-7-hydroxycoumarin, 815.
7-Hydroxy-8-acetylcoumarin oxime, 815.
$C_{11}H_{10}O_4N_2$ Succino-*o*-nitrobenzylimide, 1278.
$C_{11}H_{10}O_6N_2$ Crotonyl 3:5-dinitrobenzoate, 289.
$C_{11}H_{11}ON$ 6-Methoxy-8-methylquinoline, and its hydrobromide, 1422.
$C_{11}H_{11}O_2N$ 3-Methoxy-1-methylquinolone, 1657.
$C_{11}H_{11}O_4N$ Methoxyphenoxyacetic acid 2-acetonitriles, 994.
$C_{11}H_{12}ON_2$ 4(5)-β-Phenoxyethylglyoxaline, and its hydrochloride, 491.
Vasicine, constitution of, 1277.
$C_{11}H_{12}O_5N_2$ *o*-Nitrobenzylsuccinamic acid, 1278.
$C_{11}H_{12}O_6N_4$ Dimethylpyruvic acid 2:4-dinitrophenylhydrazone, 535.
$C_{11}H_{12}O_7N_2$ Dimethoxybenzylideneglycines, barium salts, 215.
$C_{11}H_{13}ON$ γ-*m*-Methoxyphenylbutyronitrile, 1290.
$C_{11}H_{13}O_2N$ 3-Methoxy-4-ethoxyphenylacetonitrile, 121.
$C_{11}H_{13}O_2Br$ Ethyl β-bromo-β-phenylpropionates, 1666.
$C_{11}H_{13}O_3N$ 2:4:5-Trimethoxyphenylacetonitrile, 1373.
$C_{11}H_{13}O_4N$ β-3-Amino-4-methoxybenzoylpropionic acid, 1093.
$C_{11}H_{13}O_4N_3$ Dimethylpyruvic acid *p*-nitrophenylhydrazone, 535.
$C_{11}H_{14}ON_2$ Cytisine, picrate of, 11.
$C_{11}H_{14}O_5N_2$ *o*-Aminobenzylsuccinamic acid, 1278.
Nitropropylacetanilides, 308.
$C_{11}H_{14}O_4N_4$ Diethyl ketone 2:4-dinitrophenylhydrazone, 152.
Ethyl α-aminoglyoxylate 5-nitro-*o*-tolylhydrazone, 118.
$C_{11}H_{15}ON$ Acetyl-*p*-nitropropylbenzene, 308.
Benzo-β-butylamides, 1078.
p-Nitropropylbenzene, 308.
o-Propylacetanilide, 307.
m-Propylacetanilide, 308.
$C_{11}H_{15}ON_3$ *p*-Ethylacetophenonesemicarbazone, 1874.
$C_{11}H_{15}OCl$ Chlorophenyl *n*-amyl ethers, 1834.
$C_{11}H_{15}O_3N$ γ-*m*-Methoxyphenylbutyramide, 1290.
$C_{11}H_{15}O_2N_3$ 4-Hydroxy-2-ethylacetophenone semicarbazone, 302.
$C_{11}H_{16}ON_2$ *p*-Acetamidobenzyldimethylamine, 872.
$C_{11}H_{16}O_2S$ *d*-β-Butyl *p*-toluenesulphinate, 1077.
$C_{11}H_{16}O_3S$ *d*-β-Butyl *p*-toluenesulphonate, 1077.
$C_{11}H_{19}O_2Br$ Bromoundecenoic acid, 1574.
$C_{11}H_{20}N_2Cl_2$ β-*p*-Aminophenylethyltrimethylammonium chloride hydrochloride, 873.
$C_{11}H_{21}ON_3$ *l-iso*Carvomenthone semicarbazone, 1143.
$C_{11}H_{22}O_2N_2$ α-Methyl-δ-*iso*propyl pimelicdiamide, 316.
$C_{11}H_{23}ClPb$ Methyldi-*n*-amyl-lead chloride, 43.

11 IV

$C_{11}H_7NSSe$ 1-Thiol-α-naphthaselenazole, 1766.
$C_{11}H_{10}ONBr$ Bromo-6-methoxy-8-methylquinolines, 1422.
$C_{11}H_{10}O_3N_4S$ *p*-Toluenesazothiobarbituric acid, 469.
$C_{11}H_{10}O_4N_2Br_2$ Ethyl α-bromoglyoxylate dibromonitrotolylhydrazones, 118.
$C_{11}H_{11}O_4N_2Br_2$ Ethyl α-bromoglyoxylate bromonitrotolylhydrazones, 118.
$C_{11}H_{12}ON_2S$ 4(5)-β-Phenoxyethyl-2-thiolglyoxaline, 491.
$C_{11}H_{12}O_3NBr$ Aceto-6-bromo-β-piperonylethylamide, 667.
$C_{11}H_{12}O_4N_2Br$ Ethyl α-bromoglyoxylate nitrotolylhydrazones, 118.
$C_{11}H_{12}O_4N_4Br_2$ Ethyl α-aminoglyoxylate 4:6-dibromo-5-nitro-*o*-tolylhydrazone, 118.
$C_{11}H_{13}O_3NS$ 1:5-Diethoxybenzthiazole, 1760.
$C_{11}H_{13}O_4N_4Br$ Ethyl α-aminoglyoxylate 4-bromo-5-nitro-*o*-tolylhydrazone, 118.
$C_{11}H_{14}O_6N_3As$ Hydroxydimethylallylarsonium picrate, 399.
$C_{11}H_{15}O_2NS$ *p*-Phenetylthiourethane, 1760.
$C_{11}H_{16}O_6N_3As$ Hydroxydimethyl-*n*-propylarsonium picrate, 397.
Hydroxymethyldiethylarsonium picrate, 397.
$C_{11}H_{19}NBrAu$ Pyridinodi-*n*-propylbromogold, 223.
$C_{11}H_{39}O_2NI$ Acetylretronecanol methiodide, 14.

C_{12} Group.

$C_{12}H_{14}$ ζ-Phenyl-$\Delta^{\alpha\gamma}$-hexadiene, 433.
$C_{12}H_{16}$ 2:6- and 2:7-Dimethyl-1:2:3:4-tetrahydronaphthalenes, 81.
$C_{12}H_{18}$ Di-$\Delta^{1:1}$-*cyclo*hexene, 1106.

12 II

$C_{12}H_8O_3$ 3′-Methyl-7:6-furocoumarin, 815.
$C_{12}H_8O_5$ 1-Naphthol-2:4-dicarboxylic acid, 1062.
$C_{12}H_{10}O_4$ 7-Acetonyloxycoumarin, 815.
$C_{12}H_{10}O_5$ 8-Hydroxy-7-acetonyloxycoumarin, 816.
$C_{12}H_{10}I_2$ Diphenyliodonium iodide, decomposition of, 596.
$C_{12}H_{12}O$ Tetrahydrodiphenylene oxide, 1133.
$C_{12}H_{12}O_4$ α-Benzyl-γ-butyrolactone-α-carboxylic acid, 724.
$C_{12}H_{13}N$ 3:6-Dimethyl-2-naphthylamine, and its hydrochloride, 79.
$C_{12}H_{14}O$ Cinnamyl *iso*propenyl ether, 1364.
$C_{12}H_{14}O_3$ *O*-Methylallylresacetophenones, 630.
β-Phenoxyethyl α-methylacrylate, 716.
$C_{12}H_{14}O_4$ γ-Anisoylbutyric acid, 856.
Benzyl α-acetoxypropionate, 404.
Methyl α-benzoyloxy*iso*butyrate, 716.
$C_{12}H_{14}O_5$ 2-Acetoxy-4-(β-hydroxyethoxy)acetophenone, 1099.
Ethyl 2-aldehydomethoxyphenoxyacetates, 994.
$C_{12}H_{14}O_6$ 2:4:5-Trimethoxyphenylpyruvic acid, 1373.
$C_{12}H_{16}O$ 2:6- and 2:7-Dimethyl-1:2:3:4-tetrahydronaphthols, 82.
ζ-Phenyl-Δ^{α}-hexen-δ-ol, 432.
ζ-Phenyl-Δ^{α}-hexen-γ-ol, 433.
m-Propylpropiophenone, 308.
β-Tetrahydro-1-naphthylethyl alcohol, 1531.
$C_{12}H_{16}O_2$ 3:4-Diethylphenyl acetate, 302.
2-Ethoxy-2-methylchroman, 647.
2-Hydroxy-4:5-diethylacetophenone, 302.
γ-*m*-Methoxyphenylpropyl methyl ketone, 1538.
$C_{12}H_{16}O_3$ Ethyl β-*m*-methoxyphenylpropionate, 435.
Δ^1-Menthen-2-ol-3-glyoxylolactone, 316.
Tetrahydrotubaic aldehyde, 1372.
$C_{12}H_{16}O_4$ Methyl β-3:4-dimethoxyphenylpropionate, 1414.
β-Phenoxyethyl α-hydroxy*iso*butyrate, 715.
$C_{12}H_{16}O_7$ Methyl *cyclo*hexanonetricarboxylate, 194.
$C_{12}H_{16}N_2$ Octahydrophenazine, 740.
$C_{12}H_{18}O$ 3:4-Diethylphenetole, 303.
$C_{12}H_{18}O_3$ 1-Keto-6-methyldecalin-4-carboxylic acid, 478.
$C_{12}H_{18}O_4$ 2:4-Di-β-hydroxyethoxy)ethyl benzene, 1099.
Ethyl 2:2:5-trimethyl*cyclo*pentanone-5-glyoxylate, 454.
$C_{12}H_{19}N$ *p*-Amino-*tert.*-hexylbenzene, and its salts, 1281.
β-*p*-Aminophenyl-βγ-dimethylbutane, 1282.
tert.-Hexylaniline, and its picrate, 1281.
$C_{12}H_{20}O_5$ α-Keto-ξ-methyl-γ-*iso*propylsuberic acid, and its silver salt, 316.
$C_{12}H_{20}O_7$ Acetylacetone α-methylgalactoside, 689.
Acetylacetone α-methylguloside, 688.
$C_{12}H_{22}O_6$ 4:6-Dimethyl α-methylmannopyranoside 2:3-acetone, 1015.
$C_{12}H_{22}O_{11}$ Sucrose, compound of, with potassium hydroxide, 648.
$C_{12}H_{24}O_2$ Lauric acid, potassium salt, densities of aqueous solutions of, 626.
$C_{12}H_{26}Hg$ Di-*n*-hexylmercury, 40.
$C_{12}H_{28}Pb$ Dimethyldi-*n*-amyl-lead, 42.
Diethyldi-*n*-butyl-lead, 42.

12 III

$C_{12}H_6O_4N_2$ 3-Nitronaphthalimide, 497.
$C_{12}H_6O_7N_2$ Furfuryl 3:5-dinitrobenzoate, 289.
$C_{12}H_6O_8N_4$ 4:2′:4′-Trinitro-2-aminodiphenylamine, 200.
$C_{12}H_7O_4N_3$ 2:3′-Dinitrodiphenylamine, 187.
$C_{12}H_8O_5N_2$ 2′:4′-Dinitro-2- and -4-aminodiphenyl ethers, 199.
$C_{12}H_{10}O_5N_4$ 2′:4′-Dinitro-2:4-diaminodiphenyl ether, 198.
$C_{12}H_{10}S_2Pd$ Palladium diphenylmercaptide, 1562.
$C_{12}H_{11}O_2N$ 2-Phenyl-4-*iso*propylideneoxazolone, 534.
$C_{12}H_{11}O_2Cl$ 5-*o*-Chlorophenyldihydroresorcinol, 539.
$C_{12}H_{13}ON_3$ 2:3-Dimethylindenone semicarbazone, 1161.
$C_{12}H_{13}O_2N$ Ethyl *l*-(−)β-cyano-β-phenylpropionate, 1667.
$C_{12}H_{13}O_2N$ α-Benzamido-ββ-dimethylacrylic acid, 535.
$C_{12}H_{13}O_4N$ Methyl 4-methoxyphenoxyacetate 2-acetonitrile, 994.
$C_{12}H_{13}O_5N$ β-3-Nitro-4-ethoxybenzoylpropionic acid, 1093.
γ-3-Nitro-4-methoxybenzoylbutyric acid, 1093.
$C_{12}H_{14}O_2N_4$ 1:3-Diallyl-7-methylxanthine, 1366.
2:6-Diallyloxy-7-methylpurine, 1366.
$C_{12}H_{14}O_3Br_2$ Ethyl αβ-dibromo-β-3-methoxyphenylpropionate. 1603.

$C_{12}H_{15}ON_3$ 5-Methyl-α-tetralone semicarbazone, 999.
$C_{12}H_{15}O_3N$ Acetoacet-*p*-phenetidide, 113.
$C_{12}H_{15}O_3N_3$ ω-Acetoxy-*o*-methylacetophenone semicarbazone, 1000.
Dimethylpyruvic acid phenylsemicarbazone, 525.
$C_{12}H_{15}O_4N$ β-3-Amino-4-ethoxybenzoylpropionic acid, 1093.
γ-3-Amino-4-methoxybenzoylbutyric acid, 1093.
n-Amyl *p*-nitrobenzoate, 289.
$C_{12}H_{16}ON_2$ β-Aminocrotonoxylidides, 113.
$C_{12}H_{16}O_3N_2$ β-*p*-Aminocrotono-*p*-phenetidide, 113.
$C_{12}H_{16}O_3N_2$ *p*-Nitrobenzoyl-α-methyl*iso*butylamine, 414.
$C_{12}H_{17}OCl$ *p*-Chlorophenyl *n*-hexyl ether, 1834.
$C_{12}H_{17}O_2N$ β-Benzoyloxy-α-methyl*iso*butylamines, 416.
Benzoylvalinol, 414.
$C_{12}H_{17}O_3N_3$ *m*-Methoxybenzylacetone semicarbazone, 433.
$C_{12}H_{17}O_3N$ Ethyl α-amino-γ-phenoxybutyrate, hydrochloride of, 490.
$C_{12}H_{18}O_2N_4$ 2:6-Dipropoxy-7-methylpurine, 1367.
$C_{12}H_{19}O_3N_3$ 7-Methyl-[0:3:4-*bicyclo*]nonan-2-one-3:4-dicarboxylic acid, 479.
$C_{12}H_{20}N_4Au_4$ Diethyldicyanogold, 1028.
$C_{12}H_{20}IP$ Mesityltrimethylphosphonium iodide, 464.
$C_{12}H_{21}ON_3$ *trans*-3-Methyl-α-decalone semicarbazone, 1068.
$C_{12}H_{22}O_4N_2$ Nitroso*iso*propylacetone, bimolecular, depolymerisation of, 30.
$C_{12}H_{26}S_2Hg$ Mercury di-*n*-hexylmercaptide, 1562.
$C_{12}H_{27}BrSn$ Tri-*n*-butyltin bromide, 41.
$C_{12}H_{27}ISn$ Tri-*n*-butyltin iodide, 41.
$C_{12}H_{28}N_4Au_2$ Ethylenediaminotetraethyldicyanodigold, 1029.

12 IV

$C_{12}H_6O_3NCl$ 2-Chloro-7-nitrodiphenylene oxide, 1133.
$C_{12}H_7O_8N_3S$ 2:4:3′-Trinitrodiphenylsulphone, 538.
$C_{12}H_9ON_2Cl_3$ 3:5-Dichlorobenzeneazophenols, 1006.
$C_{12}H_8ON_4S$ 7-Thiol-9-hydroxy-2(or 3)-phenylpyrimidazine, 469.
$C_{12}H_8O_4N_2S$ 2:4′-Dinitrodiphenyl sulphide, 185.
$C_{12}H_8O_5N_2Cl$ 4-Chloro-2′:4′-dinitro-2-aminodiphenyl ether, 200.
5-Chloro-2′:4′-dinitro-2-hydroxydiphenylamine, 200.
$C_{12}H_8O_5N_2Br$ 3-Bromo-1:6-dinitro-2-acetonaphthalide, 1596.
4-Bromo-2′:4′-dinitro-2-aminodiphenyl ether, 199.
5-Bromo-2′:4′-dinitro-2-hydroxydiphenylamine, 199.
$C_{12}H_8O_5N_2I$ 4-Iodo-2′:4′-dinitro-2-aminodiphenyl ether, 199.
5-Iodo-2′:4′-dinitro-2-hydroxydiphenylamine, 199.
$C_{12}H_8NClS$ 3-Chlorothiodiphenylamine, 1264.
$C_{12}H_9O_2N_2Cl$ 4-Chloro-2-nitroaceto-1-naphthalide, 1850.
$C_{12}H_9O_3N_2Br$ 2-Bromo-4-nitroaceto-1-naphthalide, 1597, 1852.
3-Bromo-1-nitro-2-acetonaphthalide, 1595.
4-Bromo-2-nitroaceto-1-naphthalide, 1854.
$C_{12}H_9O_3N_2I$ 2-Iodo-4-nitroaceto-1-naphthalide, 1853.
$C_{12}H_9O_4NS_2$ *o*-Nitrophenyl benzenethiolsulphonate, 898.
$C_{12}H_9O_4N_2S$ Dinitro-2′-aminodiphenyl sulphides, 185.
$C_{12}H_{10}ONBr$ 3-Bromo-2-acetonaphthalide, 1595.
$C_{12}H_{10}O_3N_2Cl_2$ 4-Hydroxy-3-carbethoxy-1-(3′:5′-dichlorophenyl)pyrazole, 1008.
$C_{12}H_{10}O_3N_2Br_2$ 4-Hydroxy-3-carbethoxy-1-(3′:5′-dibromophenyl)pyrazole, 1008.
$C_{12}H_{10}O_3N_2Br_4$ Ethyl 3:5-dibromophenylazo-γγ′-dibromoacetoacetate, 1008.
$C_{12}H_{10}O_3N_2Br$ 2-Bromo-3-nitro-4-acetamido-1-naphthylamine, 674.
$C_{12}H_{10}O_4N_2S$ 2-Nitro-2′-aminodiphenylsulphone, 185.
2-*o*-Nitroanilinobenzenesulphinic acid, 186.
$C_{12}H_{10}O_4N_2Br$ 2:4-Dinitrobenzylpyridinium bromide, 1843.
$C_{12}H_{11}ON_2Br$ 2-Bromo-4-acetamido-1-naphthylamine, 674.
$C_{12}H_{11}O_3N_2Br_3$ Ethyl 3:5-dibromophenylazo-γ-bromoacetoacetate, 1008.
Ethyl 3:4:5-tribromophenylazoacetoacetate, 1008.
$C_{12}H_{12}O_3N_2Cl_2$ Ethyl 3:5-dichlorophenylazoacetoacetate, 1007.
$C_{12}H_{12}O_3N_2Br_2$ Ethyl 3:5-dibromophenylazoacetoacetate, 1008.
$C_{12}H_{17}O_2NS$ 2:6- and 2:7-Dimethyl-1:2:3:4-tetrahydro-6-sulphonamides, 82.
$C_{12}H_{22}O_4N_4Ni$ Nickel methyl-*n*-propylglyoximes, 623.
$C_{12}H_{28}Cl_2S_2Pd$ Bis(dipropylsulphide)palladium dichlorides, 1558.
$C_{12}H_{34}N_4Cl_4Pt$ Dichlorotetra(propylamino)platinic chloride, 1249.

12 V

$C_{12}H_7O_8N_3Cl_2S$ 2′:5′-Dichloro-2:4-dinitrodiphenylsulphone, 538.
$C_{12}H_6O_8N_3ClS$ 4′-Chloro-2:4:3′-trinitrodiphenylsulphone, 538.
$C_{12}H_6O_8N_3BrS$ 4′-Bromo-2:4:3′-trinitrodiphenylsulphone, 538.
$C_{12}H_9O_5NBrS_2$ *o*-Nitrophenyl *p*-bromobenzenethiolsulphonate, 898.
$C_{12}H_9O_3N_2Cl_2Br$ 5-Bromo-4-hydroxy-3-carbethoxy-1-(3′:5′-dichlorophenyl)pyrazole, 1008.
$C_{12}H_9O_3N_2Cl_2Br_3$ Ethyl 3:5-dichloro-4-bromophenylazo-γγ′-dibromoacetoacetate, 1008.
$C_{12}H_{10}O_3N_2Cl_2Br_2$ Ethyl 3:5-dichlorophenylazo-γγ′-dibromoacetoacetate, 1008.

$C_{12}H_{11}O_2N_3Cl_2Br$ Ethyl 3:5-dichloro-4-bromophenylazoacetoacetate, 1008.
Ethyl 3:5-dichlorophenylazo-γ-bromoacetoacetate, 1008.
$C_{12}H_{36}O_4N_2S_2Pd$ Bis(di-*n*-propyl sulphide)palladium dinitrite, 1559.
$C_{12}H_{30}O_4N_2As_2Pd$ Bis(triethylarsine)palladium dinitrite, 1561.
$C_{12}H_{46}N_4O_2Cl_2Pb$ Tetra(propylamino)platinous chloride dihydrate, 1248.

C_{13} Group.

$C_{13}H_{16}$ ζ-Phenyl-δ-methyl-$\Delta^{\alpha\gamma}$-hexadiene, 433.

13 II

$C_{13}H_{10}O_3$ 4:3′-Dimethyl-7:6-furocoumarin, 815.
$C_{13}H_{10}O_4$ Homonaphthalic acid, 319.
8-Methoxy-3′-methyl-7:6-furocoumarin, 816.
$C_{13}H_{16}O_5$ 1-Methoxynaphthalene-2:4-dicarboxylic acid, 1062.
$C_{13}H_{10}N_2$ 2-Methylphenazine, 741.
$C_{13}H_{11}N$ 3:6-Dimethyl-2-naphthonitrile, 79.
$C_{13}H_{12}O_2$ 3:6-Dimethyl-2-naphthoic acid, 79.
$C_{13}H_{12}O_3$ 7-Allyloxy-4-methylcoumarin, 631.
7-Hydroxy-4-methyl-8-allylcoumarin, 631.
$C_{13}H_{12}O_4$ 7-Acetonyloxy-4-methylcoumarin, 815.
4-Methoxycinnamylidenepyruvic acid, and its sodium salt, 1053.
$C_{13}H_{12}O_5$ 8-Methoxy-7-acetonyloxycoumarin, 816.
$C_{13}H_{13}Br$ α-(4-Methyl-1-naphthyl)ethyl bromide, 444.
$C_{13}H_{14}O$ 5-Ethylnerolin, 454.
α-(4-Methyl-1-naphthyl)ethyl alcohol, 444.
$C_{13}H_{14}O_2$ Ethyl α-vinylcinnamate, 721.
$C_{13}H_{14}O_3$ 1:2-*cyclo*Hexanolone benzoate, 1273.
5-Methoxyphenyldihydroresorcinols, 540.
$C_{13}H_{14}O_4$ δ-Phenyl-*n*-butanetricarboxylic acids, 1360.
$C_{13}H_{14}N_2$ 2-Methyltetrahydrophenazines, 741.
$C_{13}H_{16}O$ ζ-*m*-Methoxyphenyl-$\Delta^{\alpha\gamma}$-hexadiene, 435.
$C_{13}H_{16}O_2$ Benzylidene-*cis*-1:2-*cyclo*hexanediol, 1270.
2:6- and 2:7-Dimethyl-1:2:3:4-tetrahydronaphthoic acids, 81.
Ethyl *iso*-α-benzylcrotonate, 725.
Ethyl dihydro-α-vinylcinnamate, 721.
5-Methyl-2-*iso*propylcinnamic acid, 1030.
$C_{13}H_{16}O_3$ Allylresacetophenone dimethyl ethers, 631.
1:2-*cyclo*Hexanediol benzoates, 1270.
$C_{13}H_{16}O_4$ β-3-Methoxy-4-ethoxyphenyl-α-methylacrylic acid, 121.
γ-Phenetoylbutyric acid, 856.
$C_{13}H_{16}O_6$ β-(3:4:5-Trimethoxybenzoyl)propionic acid, 1580.
$C_{13}H_{18}O$ ζ-Phenyl-δ-methyl-Δ^{α}-hexen-δ-ol, 432.
$C_{13}H_{18}O_2$ ζ-*m*-Methoxyphenyl-Δ^{α}-hexen-γ-ol, 435.
$C_{13}H_{18}O_3$ ε-*p*-Anisylhexoic acid, 1092.
Ethyl *d*-(+)β-ethoxy-β-phenylpropionate, 1665.
$C_{13}H_{18}O_4$ β-3-Methoxy-4-ethoxyphenyl-α-methylpropionic acid, 121.
$C_{13}H_{20}O_3$ γ-Keto-ε-teresantalylhexoic acid, and its silver salt, 314.
$C_{13}H_{20}O_3$ Ethyl Δ^1-*p*-menthen-3-one-4-carboxylate, 1585.
$C_{13}H_{20}O_5$ Ethyl 2:2-dimethyl*cyclo*pentan-1-one-4:5-dicarboxylate, 1128.
$C_{13}H_{20}O_8$ Methyl *n*-pentane-αβγε-tetracarboxylate, 193.
$C_{13}H_{21}N$ *p*-Amino-*tert.*-heptylbenzene, 1281.
tert.-Heptylaniline, and its picrate, 1282.
$C_{13}H_{22}O$ *s*-Di*cyclo*pentylacetone, 983.
$C_{13}H_{22}O_6$ α-Methylmannofuranoside diacetone, 1018.
Methylmannopyranoside diacetones, 1017.
$C_{13}H_{24}O$ 2-*n*-Octyl*cyclo*pentanol, 1542.
$C_{13}H_{27}N$ (−)β-Octylpiperidine, 1081.
$C_{13}H_{30}Sn$ Methyltri-*n*-butyltin, 41.
Tri-*n*-propyl-*n*-butyltin, 41.

13 III

$C_{13}H_6N_2Br_6$ ω-Bromobenzaldehyde pentabromophenylhydrazone 1007.
$C_{13}H_7O_3Br_3$ 2:4:6-Tribromoresorcinol 3-benzoate, 948.
$C_{13}H_7O_5N_3$ 2:7-Dinitrophenanthridone, 1407.
$C_{13}H_7O_6N_3$ 3:6-Dinitronaphthalomethylimide, 499.
$C_{13}H_7NBr_2$ 3:9-Dibromophenanthridine, 1407.
$C_{13}H_7N_2Br_5$ ω-Bromobenzaldehyde tetrabromophenylhydrazone, 1007.
$C_{13}H_8O_2N_2$ Phenazine-2-carboxylic acid, 741.
$C_{13}H_8O_3N_2$ Nitrophenanthridones, 1406.
$C_{13}H_8O_3Br_2$ 4:6-Dibromoresorcinol 3-benzoate, 947.
$C_{13}H_9O_4N_2$ 3-Nitronaphthalomethylimide, 497.
$C_{13}H_6N_2Br_5$ Benzaldehyde pentabromophenylhydrazidine, 1007.
$C_{13}H_9O_2N$ Hydroxyphenanthridones, 1408.

$C_{13}H_9O_3N$ 3-Hydroxynaphthalomethylimide, 498.
Nitrodiphenyl-4′-aldehydes, 114.
$C_{13}H_9O_3Br$ 6-Bromoresorcinol 3-benzoate, 947.
$C_{13}H_9N_2Br_4$ Benzaldehyde tetrabromophenylhydrazidine, 1007.
$C_{13}H_{10}ON_2$ Aminophenanthridone, 1407.
$C_{13}H_{10}OCl_2$ Chlorophenyl chlorobenzyl ethers, 1839.
$C_{13}H_{10}O_3N_2$ 3-Aminonaphthalomethylimide, 498.
3-Nitro-4-aminodiphenylmethane, 1873.
$C_{13}H_{10}O_3N_2$ 3-Nitro-6-methylphenoxazine, 1313.
$C_{13}H_{10}O_6N_4$ Protocatechualdehyde 2:4-dinitrophenylhydrazone, 152.
$C_{13}H_{10}O_6N_4$ 3:5-Dihydroxy-2-carboxyphenylacetylcarbinol dinitrophenylhydrazone, 1469.
$C_{13}H_{10}N_2Se$ 1-Anilinobenzselenazole, and its picrate, 1764.
$C_{13}H_{11}OCl$ 3:6-Dimethyl-2-naphthoyl chloride, 79.
$C_{13}H_{11}O_2N_3$ 3:6-Diaminonaphthalomethylimide, 499.
$C_{13}H_{11}O_2N$ 2-Aminoquinol 4-benzoate, 198.
$C_{13}H_{11}O_5N_3$ 2′:4′-Dinitro-2-hydroxy-*N*-methyldiphenylamine, 1313.
2′:4′-Dinitro-2-methylaminodiphenyl ether, 1313.
$C_{13}H_{11}O_5N_3$ 2′:4-Dinitro-2-amino-4-methoxydiphenyl ether, 199.
2′:4′-Dinitro-2-hydroxy-5-methoxydiphenylamine, 199.
$C_{13}H_{13}O_2N_2$ Nitrobenzylaniline, rate of reaction of benzyl bromide with, 16.
$C_{13}H_{13}O_3S_2$ Phenyl *p*-toluenethiolsulphonate, 898.
$C_{13}H_{13}O_3N_2$ 1-Methoxynaphthalene-2:4-dicarboxylamide, 1063.
$C_{13}H_{13}O_4N_3$ Nitro-4-acetamido-1-naphthyl methyl ethers, 673.
$C_{13}H_{13}OBr$ *β*-6-Methoxy-1-naphthylethyl bromide, 452.
$C_{13}H_{13}O_2N_3$ 3-Carbethoxy-4-hydroxy-1-nitrotolylpyrazoles, 119.
Ethyl nitrotolylazoacetoacetates, 118.
$C_{13}H_{15}O_4N$ *γ*-3-Nitro-4-ethoxybenzoylbutyric acid, 1093.
δ-3-Nitro-4-methoxybenzoylvaleric acid, 1093.
$C_{13}H_{17}O_4N$ *γ*-3-Amino-4-ethoxybenzoylbutyric acid, 1093.
δ-3-Amino-4-methoxybenzoylvaleric acid, 1093.
$C_{13}H_{17}O_5N_3$ Ethyl 2-aldehydomethoxyphenoxyacetate semicarbazones, 994.
$C_{13}H_{19}ON_3$ *p*-*n*-Propylpropiophenone semicarbazone, 307.
m-Propylpropiophenone semicarbazone, 308.
$C_{13}H_{19}OCl$ *p*-Chlorophenyl *n*-heptyl ether, 1834.
$C_{13}H_{19}O_2N_3$ 2-Hydroxy-4:5-diethylacetophenone semicarbazone, 302.
$C_{13}H_{19}O_3N_3$ Tetrahydrotubaic aldehyde semicarbazone, 1372.
$C_{13}H_{21}O_3N_3$ 1-Keto-6-methyldecalin-4-carboxylic acid semicarbazone, 478.

13 IV

$C_{13}H_4O_2N_2Cl_5$ Nitroso*cyclo*azipentachlorobenztriazone, 1007.
$C_{13}H_4O_2N_2Br_5$ Nitroso*cyclo*azipentabromobenztriazone, 1007.
$C_{13}H_5O_2N_3Cl_6$ Chloronitrobenzaldehyde pentachlorophenylhydrazones, 1007.
$C_{13}H_5O_2N_3Br_4$ Nitroso*cyclo*azitetrabromobenztriazone, 1007.
$C_{13}H_5O_2N_3Br_6$ Bromonitrobenzaldehyde pentabromophenylhydrazones, 1007.
$C_{13}H_5O_2N_3Br_5$ Bromonitrobenzaldehyde tetrabromophenylhydrazones, 1007.
$C_{13}H_7O_2N_4Cl_5$ Nitrobenzaldehyde pentachlorophenylhydrazidines, 1007.
$C_{13}H_7O_2N_4Br_5$ Nitrobenzaldehyde pentabromophenylhydrazidines, 1007.
$C_{13}H_7O_3N_2Cl$ Chloronitrophenanthridone, 1407.
$C_{13}H_7O_4N_2Br$ 9-Bromodinitrofluorenes, 1608.
$C_{13}H_7O_5NBr_2$ 2:4-Dibromo-6-nitroresorcinol 3-benzoate, 948.
$C_{13}H_8ONBr$ 3-Bromophenanthridone, 1407.
$C_{13}H_8O_2NCl$ 3-Chloronaphthalomethylimide, 498.
$C_{13}H_8O_2NBr$ 9-Bromo-2-nitrofluorene, 1608.
$C_{13}H_8O_2N_4Br_4$ Nitrobenzaldehyde tetrabromophenylhydrazidines, 1007.
$C_{13}H_8O_3NBr$ 2-Bromo-5-nitrobenzophenone, 1238.
$C_{13}H_8O_3N_2Cl_2$ Dichloronitrobenzanilides, 1006.
$C_{13}H_8O_3N_2Br_2$ Dibromonitrobenzanilides, 1006.
$C_{13}H_9OCl_3S$ *S*-Diphenylyl-2-oxytrichloromethylthiol, 681.
$C_{13}H_9O_4N_4Cl$ *o*-Chlorobenzaldehyde 2:4-dinitrophenylhydrazone, 152.
$C_{13}H_{10}ON_2Se$ 1-Acetamido-*a*-naphthaselenazole, 1766.
$C_{13}H_{10}OClBr$ Chlorophenyl bromobenzyl ethers, 1839.
$C_{13}H_{10}OClF$ Chlorophenyl fluorobenzyl ethers, 1839.
$C_{13}H_{10}OClAs$ 10-Chloro-2-methylphenoxarsine, 1051.
$C_{13}H_{10}O_3Cl_2S_2$ 2:5-Dichlorophenyl *p*-toluenethiolsulphonate, 898.
$C_{13}H_{10}O_3NCl$ Chlorophenyl nitrobenzyl ethers, 1839.
$C_{13}H_{10}O_3NBr$ *o*-Bromophenyl nitrobenzyl ethers, 1839.
$C_{13}H_{10}O_3N_2S$ 2-Nitro-2′-formamidodiphenyl sulphide, 341.
$C_{13}H_{10}O_4N_2S$ 5-Nitro-2-phenylbenzthiazoline *S*-dioxide, 1265.
$C_{13}H_{11}ON_2F$ Fluorodiphenylcarbamides, 1822.
$C_{13}H_{11}O_2N_2Cl$ 3- and 4-Chloro-4′-nitrobenzylaniline, 18.
$C_{13}H_{11}O_3N_2Br$ 5-Bromo-3-nitro-4-aminodiphenylmethane, 1875.
$C_{13}H_{11}O_3ClS_2$ *p*-Chlorophenyl *p*-toluenethiolsulphonate, 898.
$C_{13}H_{11}O_3BrS_2$ *p*-Bromophenyl *p*-toluenethiolsulphonate, 898.
$C_{13}H_{11}O_5N_2Cl_2$ 5:5-Dichloro-3-carbethoxy-1-(4′-nitro-*o*-tolyl)-4-pyrazolone, 119.

$C_{13}H_{11}O_5N_3Br_2$ 3-Carbethoxy-4-hydroxy-1-dibromonitrotolylpyrazoles, 119.
$C_{13}H_{11}O_5N_3Br_4$ Ethyl dibromonitrotolylazo-$\gamma\gamma$-dibromoacetoacetates, 119.
$C_{13}H_{12}O_2N_2S$ 2-*o*-Nitroanilinophenyl methyl sulphide, 187.
2-Nitro-2′-methylaminodiphenyl sulphide, 184.
$C_{13}H_{12}O_4N_2S$ 4-Nitro-2-methanesulphonyldiphenylamine, 1265.
$C_{13}H_{12}O_5N_3Cl$ 5-Chloro-3-carbethoxy-4-hydroxy-1-nitrotolylpyrazoles, 119.
$C_{13}H_{12}O_5N_3Br$ 5-Bromo-3-carbethoxy-4-hydroxy-1-nitrotolylpyrazoles, 119.
3-Carbethoxy-4-hydroxy-1-bromonitrotolylpyrazoles, 119.
$C_{13}H_{12}O_5N_3Br_3$ Ethyl bromonitrotolylazo-$\gamma\gamma$-dibromoacetoacetates, 119.
Ethyl dibromonitrotolylazo-γ-bromoacetoacetates, 118.
$C_{13}H_{13}OCl_4Fe$ 1:2:3:4-Tetrahydroxanthylium ferrichloride, 1118.
$C_{13}H_{13}O_5N_3Br_2$ Ethyl bromonitrotolylazo-γ-bromoacetoacetates, 118.
Ethyl dibromonitrotolylazoacetoacetates, 118.
Ethyl nitrotolylazo-$\gamma\gamma$-dibromoacetoacetates, 119.
$C_{13}H_{14}O_4NCl$ Ethyl 6-methoxyphenoxyacetate 2-chloroacetonitrile, 995.
$C_{13}H_{14}O_5N_3Br$ Ethyl bromonitrotolylazoacetoacetates, 118.
Ethyl nitrotolylazo-γ-bromoacetoacetates, 118.
$C_{13}H_{16}O_4NAs$ *p*-Oxyarsinopimelanilic acid, 291.
$C_{13}H_{18}O_6NAs$ *p*-Arsonopimelanilic acid, 291.
$C_{13}H_{19}O_5N_2As$ Pimelanilamide-*p*-arsonic acid, and its sodium salt, 291.
$C_{13}H_{19}O_7N_3S$ Di*iso*propyl sulphide picrate, 241.
$C_{13}H_{20}O_4NI$ Diacetylretronecine methiodide, 14.

13 V

$C_{13}H_{10}O_5N_3ClBr_2$ 5-Chloro-3-carbethoxy-4-hydroxy-1-dibromonitrotolylpyrazoles, 120.
$C_{13}H_{11}O_2N_2ClS$ 2-*p*-Chloro-*o*-nitroanilinophenyl methyl sulphide, 187.
$C_{13}H_{11}O_5N_3ClBr$ 5-Chloro-3-carbethoxy-4-hydroxy-1-bromonitrotolylpyrazoles, 120.
$C_{13}H_{10}O_3NCl_2As$ *p*-Dichloroarsinopimelanilic acid, 291.

C_{14} Group.

$C_{14}H_{10}$ Tolan, structure of, 855.
$C_{14}H_{14}$ 1-Ethylacenaphthene, 670.

14 II

$C_{14}H_{10}O_2$ 2:5-Dihydroxyphenanthrene, 1542.
$C_{14}H_{10}N_2$ *o*-Benzylenebenziminazole, 1806.
$C_{14}H_{12}O$ 2-Methyl-6:7-benzhydrindene, 1324.
2-Methyl-5:6-(1:2-naphtha)-γ-pyran, 1542.
$C_{14}H_{12}O_2$ *m*-Benzyloxybenzaldehyde, 1540.
$C_{14}H_{13}Cl$ β-1-Acenaphthylethyl chloride, 669.
$C_{14}H_{13}Br$ β-1-Acenaphthylethyl bromide, 669.
$C_{14}H_{14}O$ β-1-Acenaphthylethyl alcohol, 669.
$C_{14}H_{14}O_2$ β-2-Naphthyl-α-methylpropionic acid, 1324.
$C_{14}H_{14}N_2$ *NN′*-Dimethyl-9:10-dihydrophenazine, 740.
$C_{14}H_{16}O$ 2-β-Phenylethyl-Δ^2-*cyclo*hexenone, 1571.
$C_{14}H_{16}O_2$ Diallylresacetophenones, 632.
1:2:3:6-Tetrahydro-3:4:5:6-di*cyclo*pentenophthalic anhydride, 1106.
$C_{14}H_{16}O_5$ 4:6-Benzylidene 2:3-anhydro-α-methylalloside, 1196.
4:6-Benzylidene 2:3-anhydro-α-methylmannoside, 1198.
$C_{14}H_{16}O_6$ 2-Acetoxy-4-(β-acetoxyethoxy)acetophenone, 1099.
Methyl α-carbethoxyethyl phthalate, 405.
δ-Phenyl-α-methyl-*n*-butane-α-*trans*-$\beta\gamma$-tricarboxylic acid, 424.
$C_{14}H_{16}N_2$ *NN′*-Dimethyl-2:3:9:10-tetrahydrophenazine, 740.
$C_{14}H_{18}O_4$ δ-Phenetoylvaleric acid, 1093.
$C_{14}H_{18}O_5$ Ethyl β-(3:4-dimethoxybenzoyl)propionate, 1579.
β-Phenoxyethyl α-acetoxy*iso*butyrate, 715.
$C_{14}H_{18}O_6$ 4:6-Benzylidene α-methylaltroside, 1199.
$C_{14}H_{19}O_3$ Ethyl *trans*-3-methyl-Δ^2-octal-1-one-4-carboxylate, 1068.
$C_{14}H_{20}O$ 9-Keto-$\Delta^{10:11}$-dodecahydrophenanthrene, 1287.
$C_{14}H_{20}O_2$ ζ-3-Methoxyphenyl-δ-methyl-Δ^α-hexen-δ-ol, 433.
$C_{14}H_{20}O_3$ ϵ-*p*-Phenetylhexoic acid, 1093.
$C_{14}H_{20}O_5$ Ethyl *bicyclo*[0:3:3]octan-1-one-2:3-dicarboxylate, 476.
$C_{14}H_{20}O_9$ Methyl *cyclo*hexane-1:2:4:5-tetracarboxylate, 193.
$C_{14}H_{21}N$ (−)β-Piperidino-α-phenylpropane, 1083.
$C_{14}H_{22}O$ (−)Phenyl β-octyl ether, 1082.
$C_{14}H_{22}O_2$ Methyl γ-teresantalylpropionate, 314.
$C_{14}H_{22}O_3$ Ethyl 1-keto-6-methyldecalin-4-carboxylate, 478.
$C_{14}H_{22}O_4$ Ethyl dehydrohomoapofenchocamphorate, 1128.
$C_{14}H_{22}O_5$ Ethyl *trans-cyclo*pentane-1-carboxylate-2-acetoacetate, 1068.
$C_{14}H_{22}S$ (+)Phenyl β-octyl sulphide, 1082.
$C_{14}H_{23}N$ *sec.*-Octylaniline, 1282.
$C_{14}H_{24}O$ β-Δ^1-*cyclo*Hexenylethyl*cyclo*hexanol, 501.
$C_{14}H_{24}O_3$ Methyl α-keto-ξ-methyl-γ-*iso*propylsuberate, 316.
$C_{14}H_{24}O_6$ Ethyl γ-methylbutane-$\alpha\alpha\gamma$-tricarboxylate, 1128.

$C_{14}H_{26}O_4$ α-*n*-Octyladipic acid, 1542.
$C_{14}H_{32}Pb$ Diethyldi-*n*-amyl-lead, 42.
Di-*n*-propyldi-*n*-butyl-lead, 42.
$C_{14}H_{32}Sn$ Ethyltri-*n*-butyltin, 41.

14 III

$C_{14}H_9O_3N_3$ 2′-Nitro-3-phenylphthalaz-1-one, 1806.
$C_{14}H_9O_4N_3$ 1:4-Diketo-3-(4′-nitrophenyl)tetrahydrophthalazine, and its silver salt, 1811.
Phthalylnitrophenylhydrazide, 1811.
$C_{14}H_9N_2Cl$ 5-Chloro-*o*-benzylenebenziminazole, 1806.
$C_{14}H_{10}O_3Br_2$ 4:6-Dibromoanisyl 3-benzoate, 948.
$C_{14}H_{10}O_6N_2$ 2:4-Dinitro-2′-methyldiphenyl-6-carboxylic acid, compounds of, with benzene, 1858.
$C_{14}H_{10}NBr$ 3-Bromo-9-methylphenanthridine, 1407.
$C_{14}H_{11}O_2N$ Methoxyphenanthridones, 1408.
$C_{14}H_{11}O_2Cl$ *o*-Chlorobenzoin, 225.
$C_{14}H_{11}O_3Cl$ Chlorobenzyloxybenzoic acids, 1839.
$C_{14}H_{11}O_3Br$ Bromoanisyl 3-benzoates, 947.
Bromobenzyloxybenzoic acids, 1839.
$C_{14}H_{11}O_3F$ Fluorobenzyloxybenzoic acids, 1839.
$C_{14}H_{11}O_4N$ 2-Nitro-5-benzyloxybenzaldehyde, 1266.
$C_{14}H_{11}O_5N_3$ *o*-Carboxybenzonitrophenylhydrazides, 1811.
$C_{14}H_{11}O_6N_3$ 2′:4′-Dinitro-2-acetamidodiphenyl ether, 1311.
$C_{14}H_{11}N_2Br_3$ α-Bromobenzaldehyde 4:6-dibromo-*m*-tolylhydrazone, 1621.
$C_{14}H_{12}O_3N_2$ Nitrobenzo-*m*-toluidides, 1620.
$C_{14}H_{12}O_9N_4$ Vanillin 2:4-dinitrophenylhydrazone, 152.
$C_{14}H_{12}N_2Br_2$ Benzaldehyde 4:6-dibromo-*m*-tolylhydrazone, 1620.
$C_{14}H_{12}N_2Se$ 1-Phenylmethylaminobenzselenazole, picrate of, 1764.
$C_{14}H_{13}OCl$ Chlorophenyl methylbenzyl ethers, 1839.
$C_{14}H_{13}OBr$ *p*-Bromophenyl *p*-methylbenzyl ether, 1839.
$C_{14}H_{13}OAs$ 2:10-Dimethylphenoxarsine, 1052.
$C_{14}H_{13}O_3N$ 2-Nitro-5-benzyloxytoluene, 1266.
$C_{14}H_{13}N_2Br$ Benzaldehyde 6-bromo-*m*-tolylhydrazone, 1620.
$C_{14}H_{14}O_3S_2$ Benzyl *p*-toluenethiolsulphonate, 898.
$C_{14}H_{14}O_7N_2$ *dl*-1-Methyl*cyclo*hexan-1-ol-2-one 3:5-dinitrobenzoate, 1272.
$C_{14}H_{15}O_2I$ Diphenyliodyl acetate, 1676.
$C_{14}H_{15}O_2N$ 1-Methyl-Δ^2-*cyclo*pentenyl-1-carbinyl *p*-nitrobenzoate, 1536.
$C_{14}H_{15}O_5N$ *dl*-1-Methyl*cyclo*hexan-1-ol-2-one *p*-nitrobenzoate, 1272.
$C_{14}H_{15}O_7N_3$ 1-Ethyl 2-methyl diketosuccinate nitrotolylhydrazones, 120.
$C_{14}H_{17}ON$ 2-β-Phenylethyl-Δ^2-*cyclo*hexenoneoxime, 1571.
$C_{14}H_{17}O_2N_3$ *p-iso*Propylbenzaldehyde *p*-nitrophenylhydrazone, 1848.
$C_{14}H_{17}O_6N$ δ-3-Nitro-4-ethoxybenzoylvaleric acid, 1093.
$C_{14}H_{18}O_2N_2$ Ethyl β-acetamidophenylaminocrotonates, 1569.
$C_{14}H_{19}ON$ *cyclo*Pentanepropionanilide, 1069.
$C_{14}H_{19}O_3Cl$ 2-Methoxy-4:5-diethyl-β-chloropropiophenone, 303.
$C_{14}H_{19}O_4N$ δ-3-Amino-4-ethoxybenzoylvaleric acid, 1093.
Dimethyl*cyclo*hexylidene-1-cyanoacetate-2-β-propionate, 1067.
$C_{14}H_{19}O_{11}N$ Tetra-acetylglucosidyl nitrite, 1023.
$C_{14}H_{20}ON_2$ β-*cyclo*Pentylpropionic acid hydrazide, 984.
$C_{14}H_{20}N_2Br$ 8-Diethylaminomethylquinoline hydrobromide, 1144.
$C_{14}H_{21}ON$ *p*-Acetamido-*tert.*-hexylbenzene, 1281.
β-*p*-Acetamidophenyl-βγ-dimethylbutane, 1282.
$C_{14}H_{21}ON_3$ *s*-Di*cyclo*pentenylacetone semicarbazone, 983.
$C_{14}H_{21}O_3N_3$ 2-Methoxy-4:5-diethylacetophenone semicarbazone, 303.
$C_{14}H_{21}O_3N_3$ 2-Hydroxy-4-methoxy-3-*iso*amylbenzaldehyde semicarbazone, 1372.
$C_{14}H_{21}O_4N$ Dimethyl *cyclo*hexane-1-cyanoacetate-2-β-propionate, 1067.
$C_{14}H_{21}O_7I$ 1-Iodoacetyl acetone-glucose, 1024.
$C_{14}H_{22}O_5N_2$ α- and β-Dinitroketones, from caryophyllene nitrosite, 1583.
$C_{14}H_{22}O_6N_2$ 4:6-Dimethylmannonic phenylhydrazide, 1016.
$C_{14}H_{23}O_3N$ Ethyl 1-keto-6-methyldecalin-6-carboxylate oxime, 479.
$C_{14}H_{25}ON_3$ *s*-Di*cyclo*pentylacetone semicarbazone, 983.
$C_{14}H_{25}O_4N$ Ethyl piperidylacetate-α-propionates, 1744.
$C_{14}H_{27}ON_3$ 2-*n*-Octyl*cyclo*pentanone semicarbazone, 1542.
$C_{14}H_{37}O_6N$ *l-iso*Carvomenthylamine hydrogen *d*-tartrate, 1143.
$C_{14}H_{30}S_2Hg$ Mercury di-*n*-heptylmercaptide, 1562.

14 IV

$C_{14}H_7ON_3Cl$ 5-Chloro-*o*-benzoylenebenziminazole, 1806.
$C_{14}H_7O_4N_3Cl_2$ 1:4-Diketo-3-(2′:6′-dichloro-4′-nitrophenyl)tetrahydrophthalazine, 1814.
Phthalyl-2′:6′-dichloro-4′-nitrophenylhydrazide, 1814.
$C_{14}H_7O_4N_3Br_2$ 1:4-Diketo-3-(2′:6′-dibromo-4′-nitrophenyl)tetrahydrophthalazine, 1814.
Phthalyl-2′:6′-dibromo-4′-nitrophenylhydrazide, 1814.
$C_{14}H_8ON_2Br_2$ 3:5-Di-*p*-bromophenyl-1:2:4-oxadiazole, 5.
$C_{14}H_8O_3N_3Cl$ 4′-Chloro-2′-nitro-3-phenylphthalaz-1-one, 1806.
$C_{14}H_8O_3N_3Br$ 2′-Bromo-4′-nitro-3-phenylphthalaz-1-one, 1137.

$C_{14}H_8O_4N_3Cl$ 1:4-Diketo-3-(2′-chloro-4′-nitrophenyl)tetrahydrophthalazine, 1813.
Phthalyl-2′-chloro-4′-nitrophenylhydrazide, 1813.
$C_{14}H_8O_4N_3Br$ 1:4-Diketo-3-(2′-bromo-4′-nitrophenyl)tetrahydrophthalazine, 1813.
Phthalyl-2′-bromo-4′-nitrophenylhydrazide, 1813.
$C_{14}H_8O_3N_2Cl$ 5-Chloro-2-phenylbenziminazole-*o*-carboxylic acid, 1806.
$C_{14}H_8O_2N_2Br_2$ 3-Keto-1:2-*endo*-4′:6′-dibromo-*m*-tolylimino-1:2-dihydro-1:2-benz*iso*diazole 1-oxide, 1621.
$C_{14}H_8O_5N_3Cl_2$ *o*-Carboxybenzo-2′:6′-dichloro-4′-nitrophenylhydrazide, 1814.
$C_{14}H_8O_5N_3Br_2$ *o*-Carboxybenzo-2′:6′-dibromo-4′-nitrophenylhydrazide, 1814.
$C_{14}H_{10}ONCl$ 9-Chloromethoxyphenanthridines, 1408.
$C_{14}H_{10}ON_3Cl$ 4′-Chloro-2′-amino-3-phenylphthalaz-1-one, 1805.
$C_{14}H_{10}ON_3Br$ 2′-Bromo-4′-amino-3-phenylphthalaz-1-one, 1136.
$C_{14}H_{10}O_2N_2Br_2$ α-Bromonitrobenzaldehyde 4:6-dibromo-*m*-tolylhydrazones, 1620.
$C_{14}H_{10}O_2N_2Br_2$ Nitrobenzodibromo-*m*-toluidides, 1620.
$C_{14}H_{10}O_2N_2S$ 3-Nitro-*N*-acetylthiodiphenylamine, 1264.
$C_{14}H_{10}O_3N_3Cl$ *o*-Carboxy-2′-chloro-4′-nitrophenylhydrazide, 1813.
$C_{14}H_{10}O_3N_3Br$ *o*-Carboxybenzo-2′-bromo-4′-nitrophenylhydrazide, 1813.
$C_{14}H_{10}O_6N_2Cl$ 4-Chloro-2′:4′-dinitro-2-acetamidodiphenyl ether, 1312.
5-Chloro-2′:4′-dinitro-2-hydroxydiphenylamine acetate, 1312.
$C_{14}H_{10}O_6N_2Br$ 4-Bromo-2′:4′-dinitro-2-acetamidodiphenyl ether, 1312.
5-Bromo-2′:4′-dinitro-2-hydroxydiphenylamine acetate, 1311.
$C_{14}H_{10}O_6N_2I$ 5-Iodo-2′:4′-dinitro-2-hydroxydiphenylamine acetate, 1311.
$C_{14}H_{10}O_7N_4S$ 2-Acetamidophenyl picryl sulphide, 342.
$C_{14}H_{11}ONBr_2$ Benzo-4:6-dibromo-*m*-toluidide, 1620.
$C_{14}H_{11}ON_2Br$ 2′-Bromo-4′-amino-*N*-phenylphthalimidine, 1136.
$C_{14}H_{11}O_2NCu$ Copper benzoinoxime, 821.
$C_{14}H_{11}O_2N_2Br_2$ Nitrobenzaldehyde 4:6-dibromo-*m*-tolylhydrazones, 1620.
$C_{14}H_{11}O_2N_2Br$ Benzobromo-*m*-toluidides, 1620.
$C_{14}H_{11}O_3NS$ Carboxynitrophenyl 4-hydroxy-*m*-tolyl sulphides, 1237.
4-Carboxy-2-nitrophenyl *p*-tolyl ether, 1238.
$C_{14}H_{11}O_5N_2S$ Dinitro-2′-acetamidodiphenyl sulphides, 185.
$C_{14}H_{11}O_5NS$ Carboxynitrophenyl-4-hydroxy-*m*-tolylsulphones, 1237.
$C_{14}H_{11}O_7N_2S$ 2:4′-Dinitro-2′-acetamidodiphenylsulphone, 186.
$C_{14}H_{12}O_3N_2Br$ Nitrobenzaldehyde 6-bromo-*m*-tolylhydrazones, 1620.
$C_{14}H_{12}O_2N_4Br_2$ Nitrobenzenyl-4:6-dibromo-*m*-tolylhydrazidines, 1621.
$C_{14}H_{12}O_3N_2S$ 2-Aceto-*o*-nitroanilidophenyl mercaptan, 187.
2-Nitro-2′-acetamidodiphenyl sulphide, 184.
$C_{14}H_{12}O_3I_2S$ Di-*p*-iodobenzyl sulphite, 1818.
$C_{14}H_{12}O_4N_2S$ 5-Nitro-2-phenyl-1-methylbenzthiazoline *S*-dioxide, 1265.
$C_{14}H_{12}O_4N_2Cu$ Copper disalicylaldoxime, 733.
$C_{14}H_{12}O_4N_2Pt$ Disalicylaldoximeplatinum, 461.
$C_{14}H_{12}O_5N_2S$ 2-Nitro-2′-acetamidodiphenylsulphone, 185.
$C_{14}H_{12}ONCl_2$ *dl-iso*Di-*o*-chlorophenylhydroxyethylamine, 1123.
$C_{14}H_{13}O_4NS_2$ *p*-Nitrobenzyl *p*-toluenethiolsulphonate, 898.
$C_{14}H_{14}N_2Cl_2Pt$ Dichlorostilbenediaminoplatinum, 846.
$C_{24}H_{18}O_4NAs$ *p*-Oxyarsinosuberanilic acid, 292.
$C_{14}H_{20}O_4NBr$ Ethyl pyridinium-1-acetate-2-β-propionate bromide, 1744.
$C_{14}H_{20}O_6NAs$ *p*-Arsonosuberanilic acid, and its sodium salt, 292.
Methyl *p*-arsonopimelanilate, and its sodium salt, 291.
$C_{14}H_{21}O_5N_2As$ Pimelanilomethylamide-*p*-arsonic acid, and its salts, 291.
Suberanilamide -*p*-arsonic acid, and its sodium salt, 292.
$C_{14}H_{26}O_4N_4Ni$ Nickel methyl-*n*-butylglyoximes, 623.
$C_{14}H_{28}N_2S_4Ni$ Nickel *NN*-di-*n*-propyldithiocarbamate, 624.
$C_{14}H_{36}N_2Br_2Au_2$ Ethylenediaminotetra-*n*-propyldibromodigold, 222.

14 V

$C_{14}H_{11}O_3N_2IS$ 2-*o*-Nitrophenyl-1-methylbenzthiazolonium iodide, 187.
$C_{14}H_{11}O_5N_2ClS$ 4-Chloro-2-nitro-2′-acetamidodiphenylsulphone, 185.
$C_{14}H_{14}O_3NIS$ 2-Iodo-*p*-toluenesulphon-*p*-toluidide, 1596.
$C_{14}H_{14}O_4N_2Cl_2Pt$ Disalicylaldoximinoplatinous chloride, 461.
$C_{14}H_{15}O_3NCl_2As$ *p*-Dichloroarsinosuberanilic acid, 292.

C_{15} Group.

$C_{15}H_{24}$ 1:2:4-Tripropylbenzene, 307.
$C_{15}H_{10}O_3$ Diphenyl triketone, catalytic hydrogenation of, 83.
$C_{15}H_{11}Cl$ 9-Chloromethylphenanthrene, 1323.
$C_{15}H_{12}O_2$ Dibenzoylcarbinol, 84.
o-Hydroxydibenzoylmethane, 869.
$C_{15}H_{12}O_6$ Cyanomaclurin, constitution of, 752.
Methylnaphthazarin diacetate, 333.
$C_{15}H_{13}N$ 2-Phenyl-6-methylindole, and its picrate, 1210.
$C_{15}H_{14}O$ 2′-Methyldeoxybenzoin, 1125.
$C_{15}H_{14}O_2$ *o*′-Methylbenzoin, 225.

$C_{15}H_{14}O_3$ *m*-Benzyloxyphenylacetic acid, 1541.
2-Hydroxy-5-benzyloxyacetophenone, 869.
Methylbenzyloxybenzoic acids, 1840.
p-β-Phenylethoxybenzoic acid, 1834.
r-Phenyl-*p*-tolylglycollic acid, resolution of, 153.
$C_{15}H_{14}O_4$ *r*-4-Methoxybenzilic acid, 153.
Methyl-2-naphthylmethylmalonic acid, 1324.
$C_{15}H_{16}S_2$ αγ-Bis(phenylthio)propane, 1557.
$C_{15}H_{16}O_2$ 1-Keto-7-methoxyhexahydrophenanthrene, 1291.
$C_{15}H_{16}O_3$ Diphenylglycerol, 84.
$C_{15}H_{16}O_6$ Picrotoxinin, constitution of, 997.
$C_{15}H_{16}N_2$ Acetophenone tolylhydrazones, 1210.
$C_{15}H_{16}S$ (−)Phenyl α-phenyl-β-propyl sulphide, 1084.
$C_{15}H_{18}O_3$ 6-*as*-Octahydrophenanthroic acid, 768.
$C_{15}H_{18}O_3$ Ethyl *C*-cinnamylacetoacetate, 1364.
Ethyl γ-cinnamyloxycrotonate, 1364.
β-*m*-Methoxyphenylethyl*cyclo*hexane-2:6-dione, 1290.
2-*O*-Methyl-4-*O*-allyl-5-allylresacetophenone, 632.
$C_{15}H_{18}O_4$ Picrotic acid, constitution of, 997.
$C_{15}H_{18}O_6$ Ethyl β-(3:4-dimethoxybenzoyl)-β-hydroxymethylenepropionate, 1579.
$C_{15}H_{18}O_7$ Picrotin, constitution of, 997.
$C_{15}H_{20}O_4$ Ethyl β-3-methoxy-4-ethoxyphenyl-α-methylacrylate, 121.
5-Keto-8-*m*-methoxyphenyloctoic acid, 1290.
$C_{15}H_{20}O_6$ 4:6-Benzylidene methyl α-methylaltrosides, 1197.
$C_{15}H_{22}O$ *s*-Di-Δ^1-*cyclo*hexenylacetone, 983.
2:5-Dipropylpropiophenone, 307.
ε-(2:2:6-Trimethyl-Δ^6-*cyclo*hexenyl)-γ-methylpent-δ-en-α-yn-γ-ol, 586.
$C_{15}H_{23}Cl$ α- and β-Santalyl chlorides, 313.
$C_{15}H_{24}O$ α- and β-Santalols, 309.
ε-(2:2:6-Trimethyl-Δ^6-*cyclo*hexenyl)-γ-methyl-$\Delta^{\beta\delta}$-pentadien-α-ol, 586.
$C_{15}H_{24}O_4$ Clovenic acid, 1297.
$C_{15}H_{25}N$ (−)*N*-β-Octyl-*p*-toluidine, 1081.
$C_{15}H_{28}O_6$ Ethyl β-methylpentane-ββδε-tricarboxylate, 1128.
$C_{15}H_{26}N_2$ β-(Benzylethylamino)triethylamine, and its picrate, 1424.
$C_{15}H_{27}N_3$ β-(*o*-Aminobenzylethylamino)triethylamine, and its picrate, 1424.
$C_{15}H_{29}Br$ ε-(2:2:6-Trimethyl*cyclo*hexyl)-γ-methyl-*n*-amyl bromide, 585.

15 III

$C_{15}H_{10}N_2Cl_6$ ωαβ-Trichloro-β-phenylpropaldehyde 2:4:6-trichlorophenylhydrazone, 92.
$C_{15}H_{10}N_2Br_6$ ωαβ-Tribromo-β-phenylpropaldehyde 2:4:6-tribromophenylhydrazone, 91.
$C_{15}H_{11}O_2N$ Acetoxyphenanthridones, 1408.
$C_{15}H_{11}O_3N_3$ 2′-Nitro-3-phenyl-4-methylphthalaz-1-one, 1807.
$C_{15}H_{11}O_4N_3$ 4-Keto-1-methoxy-3-(nitrophenyl)-3:4-dihydrophthalazines, 1812.
Phthalyl-4′-nitro-2′-methylphenylhydrazide, 1812.
$C_{15}H_{11}O_6Cl$ Cyanidin chloride, 428.
$C_{15}H_{11}N_2Cl_5$ ωαβ-Trichloro-β-phenylpropaldehyde 2:4-dichlorophenylhydrazone, 92.
$C_{15}H_{11}N_2Br_3$ Cinnamaldehyde 2:4:6-tribromophenylhydrazone, 92.
$C_{15}H_{11}N_2Br_5$ ωαβ-Tribromo-β-phenylpropaldehyde 2:4-dibromophenylhydrazone, 91.
$C_{15}H_{12}ON_2$ 3-Methyloximino-2-phenylindolone, 1210.
3-Nitroso-2-phenyl-1-methylindole, 1210.
3-Oximino-2-phenylmethylindoles, 1211.
$C_{15}H_{12}O_2N_2$ 4-Keto-1-methoxy-3-phenyl-3:4-dihydrophthalazine, 1815.
$C_{15}H_{12}O_3N_2$ 3-Acetamidonaphthalomethylimide, 498.
$C_{15}H_{12}O_7N_2$ *m*-Methoxybenzyl 3:5-dinitrobenzoate, 1123.
$C_{15}H_{12}N_2Br_2$ Cinnamaldehyde 2:4-dibromophenylhydrazone, 92.
$C_{15}H_{13}ON_3$ 2′-Amino-3-phenyl-4-methylphthalaz-1-one, 1808.
$C_{15}H_{13}O_2F$ β-*p*-Fluorophenylethyl benzoate, 1821.
$C_{15}H_{13}O_2As$ *dl*-10-Ethylphenoxarsine-2-carboxylic acid, resolution of, 1268.
$C_{15}H_{13}O_4N$ *r*-*o*-Benzamidomandelic acid, 107.
m-Ethylphenol *p*-nitrobenzoate, 302.
4′-Nitro-4-hydroxy-2-methyldeoxybenzoin, 1126.
$C_{15}H_{13}O_5N_3$ *o*-Carboxybenzo-4′-nitro-2′-methylphenylhydrazide, 1812.
3:5-Dinitro-4-acetamidodiphenylmethane, 1875.
$C_{15}H_{13}O_3B$ Droserone boroacetate, 335.
$C_{15}H_{14}OS_2$ αα′-Bis(phenylthio)acetone, 1557.
$C_{15}H_{14}O_2Br_2$ Trimethylene glycol bis-*p*-bromophenyl ether, 1835.
$C_{15}H_{14}O_3N_2$ 3-Nitro-4-acetamidodiphenylmethane, 1875.
$C_{15}H_{14}O_5S_2$ α-*p*-Carboxyphenylsulphonyl-α-phenylthioethanes, 19.
$C_{15}H_{14}O_8N_4$ Veratraldehyde 2:4-dinitrophenylhydrazone, 152.
$C_{15}H_{15}ON$ Phenacyl-*m*-toluidine, 1211.
$C_{15}H_{15}ON_3$ 1-Keto-3-(2′-aminophenyl)-4-methyltetrahydrophthalazine, 1808.
$C_{15}H_{15}O_2N$ *p*-Aminophenylethyl benzoate, 1821.
$C_{15}H_{15}BrSe$ Fluorenyl-9-dimethylselenonium bromide, 1611.
$C_{15}H_{16}O_6N_2$ *p*-Δ^1-*cyclo*Hexenylethyl 3:5-dinitrobenzoate, 501.

$C_{15}H_{17}O_3N_3$ 5-Nitro-8-piperidinomethylquinoline, and its hydrobromide, 1424.
$C_{15}H_{17}O_3As$ 2:10:10-Trimethylphenoxarsonium hydroxide, salts of, 1052.
$C_{15}H_{19}ON_3$ 2-β-Phenylethyl-Δ^2-*cyclo*hexenone semicarbazone, 1571.
$C_{15}H_{19}O_9Br_3$ Trisbromoacetyl acetone-glucose, 1024.
$C_{15}H_{19}O_9I_3$ Trisiodoacetyl acetone-glucose, 1024.
$C_{15}H_{20}ON_2$ Anagyrine, and its salts, 10.
$C_{15}H_{20}O_4N_4$ 4-*iso*Propyl*cyclo*hexan-1-one 2:4-dinitrophenylhydrazone, 152.
$C_{15}H_{20}O_{10}Cl_2$ 4-Dichloroacetyl 2:3:6-triacetyl β-methylglucoside, 1181.
$C_{15}H_{21}N_3O_2$ Eserine, synthesis of, 755.
$C_{15}H_{23}ON$ *p*-Acetamido-*tert.*-heptylbenzene, 1281.
$C_{15}H_{25}O_3N_3$ β-(*o*-Nitrobenzylethylamino)triethylamine, and its picrate, 1424.
$C_{15}H_{25}O_3N_3$ Ethyl 1-keto-6-methyldecalin-4-carboxylate semicarbazone, 479.
$C_{15}H_{33}OP$ Tri-*n*-amylphosphine oxide, 1557.
$C_{15}H_{33}BrSn$ Tri-*n*-amyltin bromide, 41.
$C_{15}H_{33}ISn$ Tri-*n*-amyltin iodide, 41.

15 IV

$C_{15}H_9O_4N_2Cl_3$ 4-Keto-1-methoxy-3-(2′:6′-dichloro-4′-nitrophenyl)-3:4-dihydrophthalazine, 1814.
$C_{15}H_{10}O_3N_2Cl$ 4′-Chloro-2′-nitro-3-phenyl-4-methylphthalaz-1-one, 1807.
$C_{15}H_{10}O_3N_2Br$ Bromonitro-3-phenylmethylphthalazones, 1137.
$C_{15}H_{10}O_4N_2Cl$ 4-Keto-1-methoxy-3-(2′-chloro-4′-nitrophenyl)-3:4-dihydrophthalazine, 1813.
$C_{15}H_{10}O_4N_2Br$ 4-Keto-1-methoxy-3-(2′-bromo-4′-nitrophenyl)-3:4-dihydrophthalazine, 1813.
$C_{15}H_{11}OCl_4Fe$ Flavylium ferrichloride, 86.
$C_{15}H_{11}O_2N_2Cl_4$ $\omega\alpha\beta$-Trichloro-β-phenylpropaldehyde 2-chloro-4-nitrophenylhydrazone, 92.
$C_{15}H_{11}O_2N_2Br_4$ $\omega\alpha\beta$-Tribromo-β-phenylpropaldehyde 2-bromo-4-nitrophenylhydrazone, 92.
$C_{15}H_{12}ON_2Br_4$ *s*-Bis-4:6-dibromo-*m*-tolylurea, 1620.
$C_{15}H_{13}ON_3Cl$ 4′-Chloro-2′-amino-3-phenyl-4-methylphthalaz-1-one, 1808.
1-Keto-3-(4′-chloro-2′-aminophenyl)-4-methyltetrahydrophthalazine, 1808.
$C_{15}H_{13}ON_3Br$ 2′-Bromo-4′-amino-3-phenyl-4-methylphthalazone, 1137.
$C_{15}H_{12}O_3N_2Cl$ Cinnamaldehyde 2-chloro-4-nitrophenylhydrazone, 92.
$C_{15}H_{12}O_3N_2Br$ Cinnamaldehyde 2-bromo-4-nitrophenylhydrazone, 92.
$C_{15}H_{12}O_3N_2Br_2$ $\omega\alpha\beta$-Tribromo-β-phenylpropaldehyde *p*-nitrophenylhydrazone, 91.
$C_{15}H_{12}O_4N_2S$ Dimethylsulphonium 9-[2:7-dinitrofluorenylidide], 1611.
$C_{15}H_{12}O_2NS$ Dimethylsulphonium 9-[2-nitrofluorenylidide], 1610.
$C_{15}H_{13}O_3NS$ ω-Nitro-ω-(*p*-thiotolyl)acetophenone, 9.
$C_{15}H_{13}O_5NS$ 2-Acetamido-2′-carboxydiphenylsulphone, 1237.
$C_{15}H_{13}O_5N_2S$ 2-Aceto-*op*-dinitroanilidophenyl methyl sulphide, 187.
5-Nitro-2-aceto-*o*-nitroanilidophenyl methyl sulphide, 188.
$C_{15}H_{13}O_7NS$ 4-Carboxy-2-nitrophenyl 3-methanesulphonyl-*p*-tolyl ether, 1238.
$C_{15}H_{13}O_7N_2S$ 5-Nitro-2-aceto-*o*-nitrophenylamidophenylmethylsulphone, 187.
$C_{15}H_{14}ON_2Br_2$ *s*-Bis-6-bromo-*m*-tolylurea, 1620.
$C_{15}H_{14}ON_3Br$ 1-Keto-3-(2′-bromo-4′-aminophenyl)-4-methyltetrahydrophthalazine, 1137.
$C_{15}H_{14}O_3N_2S$ 2-Aceto-*o*-nitroanilidophenyl methyl sulphide, 187.
2-Nitro-2′-methylacetamidodiphenyl sulphide, 185.
$C_{15}H_{14}O_4N_2S$ 5-Nitro-2-phenyl-1:1-dimethylbenzthiazoline *S*-dioxide, 1265.
$C_{15}H_{14}O_5N_2S$ 2-Aceto-*o*-nitroanilinophenylmethylsulphone, 186.
$C_{15}H_{16}OIAs$ 2:10:10-Trimethylphenoxarsonium iodide, 1052.
$C_{15}H_{16}O_3N_2S$ 2-Nitro-2′-dimethylamino-5′-methyldiphenyl sulphide, 185.
$C_{15}H_{17}O_3NS$ *N*-Methyl-*p*-toluenesulphon-*o*-anisidide, 1313.
$C_{15}H_{23}O_5NAs$ Ethyl *p*-arsonopimelanilate, and its sodium salt, 291.
Methyl *p*-arsonosuberanilate, and its sodium salt, 292.
$C_{15}H_{23}O_5N_2As$ Pimelanilodimethylamide-*p*-arsonic acid, and its sodium salt, 291.
Pimelaniloethylamide-*p*-arsonic acid, and its sodium salt, 291.
Suberanilomethylamide-*p*-arsonic acid, and its sodium salt, 293.

15 V

$C_{15}H_{13}O_3N_2ClS$ 2-Aceto-*p*-chloro-*o*-nitroanilidophenylmethyl sulphide, 187.
$C_{15}H_{13}O_4N_2BrS$ 2:7-Dinitrofluorenyl-9-dimethylsulphonium bromide, 1611.
$C_{15}H_{13}O_5N_2ClS$ 2-Aceto-*p*-chloro-*o*-nitroanilidophenylmethylsulphone, 186.
$C_{15}H_{14}O_2NBrS$ 2-Nitrofluorenyl-9-dimethylsulphonium bromide, 1610.

C_{16} Group.

$C_{16}H_{10}O_3$ Anthronylideneacetic acid, 1104.
$C_{16}H_{12}O$ Methoxyflavones, 1165.
$C_{16}H_{12}O_3$ 3-β-Phenylethylphthalic anhydride, 434.
$C_{16}H_{13}Cl$ 1-Chloro-3-phenyl-2-methylindene, 1160.
$C_{16}H_{14}O$ 1-Hydroxy-1-phenyl-2-methylindene, 1159.
$C_{16}H_{14}O_2$ Dimethoxyphenanthrenes, 1542.
$C_{16}H_{14}O_3$ $\alpha\beta$-Dihydroxy-γ-keto-$\alpha\gamma$-diphenylpropane, 85.
3-Methoxy-2-phenylbenzo-2-pyranol, 1165.
$C_{16}H_{14}O_4$ *o*-Acetylphenyl *o*-methoxybenzoate, 869.
4′-Hydroxy-7-methoxyflavanone, 867.
$C_{16}H_{14}O_6$ Peltogynol, 748.
$C_{16}H_{14}N_2$ 8-Anilinomethylquinoline, 1144.

$C_{16}H_{16}O_2$ 1-Hydroxy-2-(2′-carboxy*cyclo*pentyl)-3:4-dihydronaphthalene lactones, 1539.
4-Methoxy-2-methyldeoxybenzoin, 1125.
$C_{16}H_{16}O_3$ *cis*-αβ-Di-*o*-methoxyphenylethylene oxide, 1121.
3-β-Phenylethyl-1:2:3:6-tetrahydrophthalic anhydride, 434.
p-γ-Phenylpropoxybenzoic acid, 1834.
$C_{16}H_{16}O_4$ *m*-(β-Benzoyloxyethoxy)anisole, 1099.
$C_{16}H_{16}O_5$ Ethyl 1-naphthol-2:4-dicarboxylate, 1062.
$C_{16}H_{16}O_7$ Ethyl β-(3:4-dimethoxybenzoyl)-Δ^{β}-crotonolactone-γ-carboxylate, 1579.
$C_{16}H_{17}N$ 3:6-Diethylcarbazole, 743.
$C_{16}H_{18}O$ 2-Keto-4-phenyl-$\Delta^{1:3}$-octalin, 1286.
$C_{16}H_{18}O_2$ Tetrahydro-5:6:7:8-di*cyclo*penteno-1:4-naphthaquinone, 1106.
$C_{16}H_{18}O_3$ α-(*cis*-2-Carboxy*cyclo*pentyl)-γ-phenylbutyric anhydride, 1538.
1-Keto-2-(2′-carboxy*cyclo*pentyl)tetrahydronaphthalenes, 1539.
$C_{16}H_{19}N$ (−)β-*p*-Toluidino-α-phenylpropane, 1083.
$C_{16}H_{20}O$ 2-Keto-4-phenyldecalin, 1286.
$C_{16}H_{20}O_2$ 2-(2′-*trans*-Carboxy*cyclo*pentyl)tetrahydronaphthalene, 1540.
$C_{16}H_{20}O_3$ 3:5-Diallylresacetophenone dimethyl ether, 632.
Dodecahydrophenanthrene-9:10-dicarboxylic anhydride, 1106.
$C_{16}H_{20}O_4$ α-(2-Carboxy*cyclo*pentyl)-γ-phenylbutyric acids, 1538.
Ethyl benzylvinylmalonate, 721.
$C_{16}H_{20}O_5$ Tetrahydrotubaic aldehyde diacetate, 1372.
$C_{16}H_{20}Si$ Diphenyldiethylsilicane, 1090.
$C_{16}H_{21}N$ 3:6-Diethyl-1:2:3:4-tetrahydrocarbazole, 743.
$C_{16}H_{32}O_3$ 4:6-Benzylidene-2:3-dimethyl α-methylaltroside, 1197.
$C_{16}H_{23}N_3$ 8-(β-Diethylaminoethylaminomethyl)quinoline, and its trihydrobromide, 1426.
$C_{16}H_{24}O_2$ Substance, from acetyl*cyclo*hexene and 1-keto-2-methyltetrahydronaphthalene, 1287.
$C_{16}H_{24}O_5$ Ethyl 7-methyl-[0:3:4-*bicyclo*]nonan-2-one-3:4-dicarboxylate, 479.
$C_{16}H_{26}O_3$ Substance, from clovenic anhydride and magnesium methyl iodide, 1298.
$C_{16}H_{26}O_4$ Ethyl 1-carbethoxy*cyclo*pentane-2-succinate, 476.
$C_{16}H_{28}O_5$ Ethyl α-keto-ξ-methyl-γ-*iso*propylsuberate, 316.
$C_{16}H_{36}Pb$ Di-*n*-butyldi*iso*butyl-lead, 42.
Di-*n*-propyldi-*n*-amyl-lead, 42.
$C_{16}H_{36}Sn$ Tetra-*n*-butyltin, 41.

16 III

$C_{16}H_{10}O_3Cl_2$ 1:5-Dichloroanthronylacetic acid, 1104.
$C_{16}H_{10}O_4N_2$ 5-Keto-2-phenyl-4-*o*-nitrobenzylidene-4:5-dihydro-oxazole, 1267.
$C_{16}H_{10}O_5N_{10}$ 4-Nitro-3-azoxy-5-pyridylpyrazole, 420.
$C_{16}H_{11}ON_3$ 2:2′-Anhydro-2:5-diketo-3-(2′-aminophenyl)*iso*indolinopyrazolidocoline, and its picrate, 1802.
$C_{16}H_{11}O_2N_3$ 2′-Amino-3-phenylphthalaz-1-one-4-acetic acid lactam, 1807.
$C_{16}H_{11}O_4N_3$ 2:5-Diketo-3-(2′-nitrophenyl)*iso*indolinopyrazolidocoline, 1801.
$C_{16}H_{11}O_5N_3$ 4-Keto-1-acetoxy-3-(nitrophenyl)-3:4-dihydrophthalazines, 1811.
$C_{16}H_{12}O_4S$ 1-Anthraquinonyl β-hydroxyethyl sulphoxide, 1237.
$C_{16}H_{12}O_5N_2$ Nitro-α-benzamidocinnamic acids, 1267.
$C_{16}H_{12}O_5S$ 1-Anthraquinonyl-β-hydroxyethylsulphone, 1237.
$C_{16}H_{12}N_2S$ 1-Phenyl-3-methyl-4:5-thionaphthenopyrazole, 472.
$C_{16}H_{13}O_2N$ 3:6-Diacetylcarbazole, 742.
$C_{16}H_{13}O_3N_3$ 2-(2′-Aminoanilino)*iso*indolinone-3-acetic acid lactam, and its picrate, 1803.
5:4′-Diacetyl-1-phenylbenzotriazole, 743.
2:5-Diketo-3-(2′-aminophenyl)*iso*indolinopyrazolidocoline, 1801.
1-Hydroxy-3-(2′-aminophenyl)-3:4-dihydrophthalazine-4-acetic acid lactam, 1805.
$C_{16}H_{13}O_5N_3$ Benzo-2′-nitrophenylhydrazide-2-β-acrylic acid, 1800.
1-Hydroxy-3(2′-nitrophenyl)-3:4-dihydrophthalazine-4-acetic acid, 1803.
2-(2′-Nitroanilino)*iso*indolinone-3-acetic acid, 1800.
$C_{16}H_{14}O_2N_2$ 4-Keto-1-ethoxy-3-phenyl-3:4-dihydrophthalazine, 1815.
$C_{16}H_{14}O_4N_2$ 2-Nitro-4:4′-diacetyldiphenylamine, 743.
$C_{16}H_{14}O_5N_4$ β-Nitroanilinocrotononitroanilides, 112.
$C_{16}H_{15}ON_3$ 5-Acetyl-1-phenyl-4′-ethylbenzotriazole, 743.
$C_{16}H_{17}O_3N_3$ 2-(2′-Aminoanilino)*iso*indolinone-3-acetic acid, 1802.
1-Hydroxy-3-(2′-aminophenyl)-3:4-dihydrophthalazine-4-acetic acid, 1805.
$C_{16}H_{15}O_4N$ 4′-Nitro-4-methoxy-2-methyldeoxybenzoin, 1126.
$C_{16}H_{16}O_5N_2$ 2-Nitro-4-acetyl-4′-ethyldiphenylamine, 743.
$C_{16}H_{16}O_4N_2$ 4′-Nitro-3-methoxy-2-methyldeoxybenzoin oxime, 1126.
$C_{16}H_{16}O_4Br$ Ethyl benzyl-β-bromovinylmalonate, 721.
$C_{16}H_{16}O_4S_2$ Methyl α-*p*-carboxyphenylsulphonyl-α-phenylthioethanes, 20.
$C_{16}H_{16}O_6S_2$ Methyl α-*p*-carboxyphenylsulphonyl-α-phenylsulphonylethane, 20.
$C_{16}H_{17}ON$ 4-Dimethylaminomethylbenzophenones, 895.
$C_{16}H_{17}O_3N$ 2-Hydroxy-4-(β-hydroxyethoxy)acetophenone anil, 1099.
$C_{16}H_{18}ON_2$ 4-Dimethylaminomethylbenzophenone oximes, 895.
$C_{16}H_{18}O_3N$ 2-Hydroxy-4-(β-hydroxyethoxy)acetophenone phenylhydrazone, 1099.
$C_{16}H_{19}O_2N$ α-Aminodi-(*o*-methoxybenzyl), 1122.
$C_{16}H_{20}O_4N_4$ Phellandral 2:4-dinitrophenylhydrazone, 152.
Thujone 2:4-dinitrophenylhydrazone, 152.
$C_{16}H_{21}O_5N_3$ Phellandral *p*-nitrophenylhydrazone, 152.

$C_{16}H_{21}O_{11}Br$ 1-Bromoacetyl tetra-acetylglucose, 1023.
$C_{16}H_{21}O_{11}I$ 1-Iodoacetyl tetra-acetyl glucose, 1023.
$C_{16}H_{22}O_4N_2$ *l*-Tetrahydrocarvone 2:4-dinitrophenylhydrazone, 316.
$C_{16}H_{22}N_2Si$ Di-*m*-aminodiphenyldiethylsilicane, 1091.
$C_{16}H_{25}ON_3$ *s*-Di-Δ^1-*cyclo*hexenylacetone semicarbazone, 983.
$C_{16}H_{29}ON_3$ *s*-Di-β-*cyclo*pentylethyl ketone semicarbazone, 984.
$C_{16}H_{34}S_2Hg$ Mercury di-*n* octylmercaptide, 1563.
$C_{16}H_{36}N_4Au_2$ Ethylenediaminotetra-*n*-propyldicyanodigold, 1029.

16 IV

$C_{16}H_9ON_2Cl_4$ 2:3:4:5-Tetrachlorobenzeneazo-β-naphthol, 1007.
$C_{16}H_9O_{10}N_5S$ 2:4:5-Trinitro-1-*m*-nitrobenzenesulphonnaphthalide, 1594.
$C_{16}H_{10}ON_2Cl_2$ 3:5-Dichlorobenzeneazo-β-naphthol, 1007.
$C_{16}H_{10}ON_2Br_2$ 3:5-Dibromobenzeneazo-β-naphthol, 1007.
$C_{16}H_{10}ON_2Cl$ 2:2′-Anhydro-2:5-diketo-3-(4′-chloro-2′-aminophenyl)*iso*indolinopyrazolidocoline, and its sulphate, 1802.
$C_{16}H_{10}O_2N_2Cl$ 4′-Chloro-2′-amino-3-phenylphthalaz-1-one-4-acetic acid lactam, 1807.
$C_{16}H_{10}O_4N_2Cl$ 2:5-Diketo-3-(chloronitrophenyl)*iso*indolinopyrazolidocolines, 1801.
$C_{16}H_{10}O_8N_4S$ 2:4-Dinitro-1-*m*-nitrobenzenesulphon-naphthalide, 1593.
$C_{16}H_{11}O_8N_3S$ 5-Nitro-1-*m*-nitrobenzenesulphon-naphthalide, 1594.
$C_{16}H_{11}N_2BrS$ 1-*p*-Bromophenyl-3-methyl-4:5-thionaphthenopyrazole, 473.
$C_{16}H_{12}O_2N_2Cl$ 4′-Chloro-2′-acetamido-3-phenylphthalaz-1-one, 1806.
2-(4′-Chloro-2′-aminoanilino)*iso*indolinone-3-acetic acid lactam, 1803.
2:5-Diketo-3-(4′-chloro-2′-aminophenyl)*iso*indolinopyrazolidocoline, 1802.
1-Hydroxy-3-chloro-2′-aminophenyl-3:4-dihydrophthalazine-4-acetic acid lactam, 1805.
$C_{16}H_{12}O_4N_2S$ *m*-Nitrobenzenesulphon-1-naphthalide, 1593.
m-Nitrobenzenesulphon-naphthalides, and their salts, 1856.
$C_{16}H_{13}O_2N_2Cl$ Benzo-4′-chloro-2′-nitrophenylhydrazide-2-β-acrylic acid, 1800.
2-(Chloronitroanilino)*iso*indolinone-3-acetic acids, 1800.
1-Hydroxy-3-(4′-chloro-2′-nitrophenyl)-3:4-dihydrophthalazine-4-acetic acids, 1803.
$C_{16}H_{13}O_3N_2Br$ 1-Hydroxy-3-(2′-bromo-4′-nitrophenyl)-3:4-dihydrophthalazine-4-acetic acid, 1135.
$C_{16}H_{13}O_6Cl_4Fe$ Methoxyflavylium ferrichlorides, 87.
$C_{16}H_{13}O_4NS$ 4-Carboxy-2-nitrophenyl 4-acetoxy-*m*-tolyl sulphide, 1237.
$C_{16}H_{13}O_7N_2S$ Benzaldehyde-2′-nitrophenylhydrazone-ω-sulphonic-2-β-acrylic acid, sodium salt, 1800.
3-(2′-Nitrophenyl)-3:4-dihydrophthalazine-1-sulphonic-4-acetic acid, sodium hydrogen salt, 1803.
$C_{16}H_{14}ON_2Cl_2$ β-Chloroanilinocrotonochloroanilides, 114.
$C_{16}H_{14}O_2N_2Cl$ 2-(4′-Chloro-2′-aminoanilino)*iso*indolinone-3-acetic acid, 1802.
1-Hydroxy-3′-(chloro-2′-aminophenyl)-3:4-dihydrophthalazine-4-acetic acids, 1805.
$C_{16}H_{14}O_3N_2Br$ 1-Hydroxy-3-(2′-bromo-4′-aminophenyl)-3:4-dihydrophthalazine-4-acetic acid, 1136.
$C_{16}H_{15}O_2NCl_2$ Acetyl derivative of *dl-iso*di-*o*-chlorophenylhydroxyethylamine, 1123.
$C_{16}H_{18}O_4N_2Si$ Di-*m*-nitrodiphenyldiethylsilicane, 1091.
$C_{16}H_{18}O_7N_2Sb$ Benzyltrimethylstibonium picrate, 399.
$C_{16}H_{24}O_5N_2As$ Pimelanilo-*n*-propylamide-*p*-arsonic acid, and its sodium salt, 292.
$C_{16}H_{24}O_5NAs$ Ethyl *p*-arsonosuberanilate, and its sodium salts, 292.
$C_{16}H_{25}O_5N_2As$ Suberanilodimethylamide-*p*-arsonic acid, and its sodium salt, 293.
Suberaniloethylamide-*p*-arsonic acid, and its sodium salt, 293.
$C_{16}H_{36}Cl_2S_2Pd$ Bis(dibutylsulphide)palladium dichlorides, 1558.

16 V

$C_{16}H_{10}O_8N_2Br_2S$ 2:4-Dibromo-1-*m*-nitrobenzenesulphon-naphthalide, 1594.
$C_{16}H_{11}O_2N_2BrS$ 1-*p*-Bromophenyl-3-methyl-4:5-thionaphthenopyrazole dioxide, 473.
$C_{16}H_{11}O_6N_2BrS$ 4-Bromo-1-*m*-nitrobenzenesulphon-naphthalide, 1594.
$C_{16}H_{12}O_7N_2ClS$ Benzaldehydechloronitrophenylhydrazone-ω-sulphonic-2-β-acrylic acids, sodium salts, 1800.
3-(4′-Chloro-2′-nitrophenyl)-3:4-dihydrophthalazine-1-sulphonic-4-acetic acid, sodium hydrogen salt, 1803.
$C_{16}H_{12}O_7N_2BrS$ 3-(2′-Bromo-4′-nitrophenyl)-3:4-dihydrophthalazine-1-sulphonic-4-acetic acid, sodium hydrogen salt, 1135.
$C_{16}H_{13}ON_2BrS$ 3-Hydroxy-2-acetyl-1-thionaphthen-*p*-bromophenylhydrazone, 473.
$C_{16}H_{36}O_4N_2S_2Pd$ Bis(di-*n*-butylsulphide)palladium dinitrite, 1559.

C_{17} Group.

$C_{17}H_{12}$ 3:4-Benzfluorene, 1322.

17 II

$C_{17}H_{10}O_3$ 3′-Phenyl-7:6-furocoumarin, 815.
$C_{17}H_{12}O_4$ 2-(3′-Carboxy-4′-hydroxybenzylidene)-1-hydrindone, 945.
7-Phenacyloxycoumarin, 815.
$C_{17}H_{12}O_5$ Methoxychromenochromones, 7-hydroxy-, 994.
$C_{17}H_{14}O_4$ 2:7-Dimethoxyphenanthrene-9-carboxylic acids, 1341.
7-(β-Hydroxyethoxy)flavone, 1100.
$C_{17}H_{16}O$ 1-Hydroxy-1-phenyl-2:3-dimethylindene, 1161.
2-(β-1′-Naphthylethyl)-Δ^2-*cyclo*pentenone, 1571.
$C_{17}H_{16}O_2$ 2-Phenylbenzopyranol 4-ethyl ether, 1164.

$C_{17}H_{16}O_4$ 7-(β-Hydroxyethoxy)flavanone, 1100.
2-Hydroxy-4-(β-hydroxyethoxy)chalkone, 1100.
$C_{17}H_{16}O_5$ *o*-Acetylphenyl 2:4-dimethoxybenzoate, 869.
2-Benzoyloxy-4-(β-hydroxyethoxy)acetophenone, 1099.
2:2′-Dihydroxy-4-(β-hydroxyethoxy)chalkone, 1101.
$C_{17}H_{16}O_7$ Methoxyphenoxyacetic acid-2-resacetophenones, 994.
$C_{17}H_{18}O_2$ 4-Methoxydimethyldeoxybenzoins, 1125.
$C_{17}H_{18}O_3$ Ethyl (+)phenyl-*p*-tolylglycollate, 154.
$C_{17}H_{19}N$ *p-iso*Propylbenzylidenebenzylamine, 1849.
$C_{17}H_{20}O_3$ 1-Keto-2-(*trans*-2′-carbomethoxy*cyclo*pentyl)tetrahydronaphthalene, 1539.
$C_{17}H_{24}O_{12}$ Methyl *n*-pentane-αββγεε-hexacarboxylate, 193.
$C_{17}H_{28}N_2$ 8-(β-Diethylaminoethylmethylaminomethyl)quinoline, and its trihydrobromide, 1425.
$C_{17}H_{26}O_2$ α-Santalylacetic acid, 313.
$C_{17}H_{26}O_3$ Methyl γ-keto-ε-teresantalylhexoate, 314.
$C_{17}H_{36}O_5$ Ethyl 3:7-dimethyl-[0:3:4-*bicyclo*]nonan-2-one-3:4-dicarboxylate, 479.
$C_{17}H_{28}O_3$ Dihydro-α-santalylacetic acid, 314.

17 III

$C_{17}H_{11}ON$ *N*-Phenylnaphthastyril, 318.
$C_{17}H_{11}O_4N$ Acetoxypropionitriles, 405.
$C_{17}H_{12}O_2S$ Phenyl 8-carboxy-1-naphthyl sulphide, 318.
$C_{17}H_{12}O_3Cl_2$ Dichloroanthronylpropionic acids, 1103.
$C_{17}H_{12}O_3Br_2$ 6-Bromo-7-(β-bromoethoxy)flavone, 1100.
$C_{17}H_{12}O_3S$ Phenyl 8-carboxy-1-naphthyl sulphoxide, 319.
$C_{17}H_{12}O_4N_2$ 2-Nitro-4-benzamido-1-naphthol, 673.
$C_{17}H_{12}N_2Se$ 1-Anilino-α-naphthaselenazole, 1766.
$C_{17}H_{12}O_5N_2$ 5-Keto-2-phenyl-4-(2′-nitro-5′-methoxybenzylidene)-4:5-dihydro-oxazole, 1267.
$C_{17}H_{13}O_4Br$ 6-Bromo-7-(β-hydroxyethoxy)flavone, 1100.
$C_{17}H_{14}O_3N_2$ 3-Acetyloximino-2-phenylmethylindolenines, 1211.
$C_{17}H_{14}O_4N_4$ 2:3-Dimethylindenone 2:4-dinitrophenylhydrazone, 1161.
$C_{17}H_{14}O_5S$ Methyl-β-1-anthraquinonyloxyethylsulphone, 1237.
$C_{17}H_{14}O_6N_2$ 2-Nitro-α-benzamido-5-methoxycinnamic acid, 1267.
$C_{17}H_{14}N_2Se$ *s*-Phenyl-β-naphthylselenourea, 1766.
$C_{17}H_{15}O_2N$ 3:6-Diacetyl-9-methylcarbazole, 742.
Phthalo-γ-phenylpropylimide, 1362.
$C_{17}H_{15}O_2N_3$ 2′-Acetamido-3-phenyl-4-methylphthalaz-1-one, 1808.
1-Keto-3-(2′-aminophenyl)-2-methyltetrahydrophthalazine-4-acetic acid lactam, 1804.
$C_{17}H_{15}O_4N_3$ 3:6-Diacetamidonaphthalomethylimide, 499.
$C_{17}H_{15}O_4Br_2$ 5-Bromo-2-hydroxy-4-(β-hydroxyethoxy)chalkone dibromide, 1100.
$C_{17}H_{15}O_5N$ 4-Hydroxy-2-ethylacetophenone *p*-nitrobenzoate, 302.
$C_{17}H_{15}O_5N_3$ 1-Keto-3-(2′-nitrophenyl)-2-methyltetrahydrophthalazine-4-acetic acid, 1804.
$C_{17}H_{15}O_6N$ Ethyl *r*-*o*-nitrobenzoylmandelate, 107.
2′-Nitro-2-hydroxy-4-(β-hydroxyethoxy)chalkone, 1101.
2-Nitro-5-methoxy-α-(*m*-methoxyphenyl)cinnamic acid, 1541.
$C_{17}H_{16}O_4N_4$ 5-Methyl-α-tetralone 2:4-dinitrophenylhydrazone, 999.
$C_{17}H_{16}O_7N_2$ γ-*m*-Methoxyphenyl-*n*-propyl 3:5-dinitrobenzoate, 435.
$C_{17}H_{17}ON$ 2-(β-1′-Naphthylethyl)-Δ^1-*cyclo*pentanone oxime, 1571.
1:2:3:4-Tetrahydro-6-naphthanilide, 80.
$C_{17}H_{17}O_4N$ 2-Amino-5-methoxy-α-(*m*-methoxyphenyl)cinnamic acid, 1541.
p-sec.-Butylphenyl *p*-nitrobenzoate, 140.
3:4-Diethylphenol *p*-nitrobenzoate, 302.
$C_{17}H_{19}O_2N_3$ *p-tert.*-Butylbenzaldehyde *p*-nitrophenylhydrazone, 1848.
4-Methoxy-2-methyldeoxybenzoin semicarbazone, 1125.
$C_{17}H_{19}O_3N_3$ Di-*o*-methoxydeoxybenzoin semicarbazone, 1122.
Di-*o*-methoxyphenylacetaldehyde semicarbazone, 1122.
$C_{17}H_{20}O_2N_4$ 4:4′-Bisethylnitrosoaminodiphenylmethane, 57.
$C_{17}H_{22}O_6N_2$ Carvomenthyl dinitrobenzoates, 1140.
$C_{17}H_{23}O_4N$ Carvomenthyl nitrobenzoates, 1140.
$C_{17}H_{25}ON$ Benzoyl-*l-iso*carvomenthylamine, 1143.
$C_{17}H_{25}O_2N$ Lettocine, and its salts, 734.
$C_{17}H_{25}O_6N$ Ethyl α-cyano-1-carbethoxy*cyclo*pentane-2-succinate, 476.
$C_{17}H_{29}O_2Br$ Bromotetrahydrosantalylacetic acid, 314.
$C_{17}H_{31}O_3N_3$ Ethyl 1-*n*-octyl*cyclo*pentan-2-one-1-carboxylate semicarbazone, 1542.

17 IV

$C_{17}H_{12}ON_2Br_2$ 4:6-Dibromo-*m*-tolueneazo-β-naphthol, 1620.
$C_{17}H_{13}ON_2Br$ 6-Bromo-*m*-tolueneazo-β-naphthol, 1620.
$C_{17}H_{14}O_3N_2S$ 2-*o*-Nitroanilino-1-naphthyl methyl sulphide, 188.
$C_{17}H_{14}O_3N_3Cl$ 4′-Chloro-2′-acetamido-3-phenyl-4-methylphthalaz-1-one, 1808.
1-Keto-3-(4′-chloro-2′-aminophenyl)-2-methyltetrahydrophthalazine-4-acetic acid lactam, 1804.
$C_{17}H_{14}O_4N_2S$ 2-Nitro-1-*p*-toluenesulphon-naphthalide, 1595.
$C_{17}H_{14}O_5N_3Cl$ 1-Keto-3-(chloro-2′-nitrophenyl)-2-methyltetrahydrophthalazine-4-acetic acids, 1804.
$C_{17}H_{14}O_5N_3Br$ 1-Keto-3-(2′-bromo-4′-nitrophenyl)-2-methyltetrahydrophthalazine-4-acetic acid, 1136.
Methyl 1-hydroxy-3-(2′-bromo-4′-nitrophenyl)-3:4-dihydrophthalazine-4-acetate, 1136.
$C_{17}H_{16}O_3N_3Cl$ 1-Keto-3-(4′-chloro-2′-aminophenyl)-2-methyltetrahydrophthalazine-4-acetic acid, 1804.

$C_{17}H_{16}O_6N_4S$ 2:4:3′-Trinitro-4′-piperidinodiphenylsulphone, 538.
$C_{17}H_{18}O_2N_2S$ Benzenesulphonylcytisine, 1054.
$C_{17}H_{20}ONI$ 4-Dimethylaminomethylbenzophenone methiodides, 895.

17 V

$C_{17}H_{12}O_6N_2BrS$ 3-Bromo-1:6-dinitro-2-*p*-toluenesulphon-naphthalide, 1596.
$C_{17}H_{13}O_4N_2BrS$ 2-Bromonitro-*p*-toluenesulphon-naphthalides, 1594.
$C_{17}H_{14}O_2NBrS$ 3-Bromo-2-*p*-toluenesulphon-naphthalide, 1595.
$C_{17}H_{14}O_2NIS$ 1-Iodo-2-*p*-toluenesulphon-naphthalide, 1596.
$C_{17}H_{15}O_2N_2BrS$ 3-Bromo-2-*p*-toluenesulphon-1:2-naphthylenediamine, 1595.

C_{18} Group.

$C_{18}H_{16}$ 9-Methyl-1:2-*cyclo*pentenophenanthrene, 444.
$C_{18}H_{18}$ 2-Methyl-1-allyl-3:4-dihydrophenanthrene, 1635.
2-Methyl-1-*n*-propylphenanthrene, 1633.
$C_{18}H_{20}$ 4:5-Benzhydrindene-1-*spirocyclo*hexane, 1637.
$C_{18}H_{22}$ *aa*-Diphenyl-*β*-methylpentane, 1219.
$C_{18}H_{24}$ Dodecahydro-1:2-benzanthracene, 769.
1-(*β*-5′-Tetralylethyl)-Δ^1-*cyclo*hexene, 1636.

18 II

$C_{18}H_8O_2$ 8:11-Ketobenzanthrone, 575.
$C_{18}H_8O_3$ 11-Hydroxybenzanthrone-8-carboxylolactone, 575.
$C_{18}H_{10}O_3$ 1:9-Benzanthrone-8-carboxylic acid, 572.
$C_{18}H_{12}O_4$ 8-(*o*-Carboxyphenyl)-1-naphthoic acid, 572.
$C_{18}H_{14}O_2$ *ω*-*β*-Naphthyl-*o*-toluic acid, 1031.
$C_{18}H_{16}O_2$ 1-Acetoxy-3-phenyl-2-methylindene, 1160.
$C_{18}H_{16}O_5$ 4′-Methoxy-7-(*β*-hydroxyethoxy)flavone, 1101.
$C_{18}H_{16}O_7$ *apo*Toxicarol, constitution of, 681.
$C_{18}H_{18}O_2$ 2-Phenyl-3-methylbenzopyranol 2-ethyl ether, 1164.
$C_{18}H_{18}O_3$ 1-Keto-6:7-dimethoxy-2-phenyltetrahydronaphthalene, 1416.
4′-Methoxy-2-phenylbenzopyranol 4-ethyl ether, 1164.
$C_{18}H_{18}O_5$ 2-Hydroxy-4-(*β*-hydroxyethoxy)-4′-methoxychalkone, 1100.
β-Veratroyl-*α*-phenylpropionic acid, 1415.
$C_{18}H_{18}O_6$ *O*-Trimethylcyanomaclurin, 754.
$C_{18}H_{18}O_9$ 4:5-Dimethoxyphenoxyacetic acid-2-phloracetophenone, 683.
$C_{18}H_{20}O$ 7-Hydroxy-1-methyl-1:2:3:4-tetrahydro-1:2-*cyclo*pentenophenanthrene, 455.
$C_{18}H_{20}O_2$ 3-Keto-7-methoxyhexahydro-1:2-*cyclo*pentenophenanthrene, 1288.
$C_{18}H_{20}O_4$ *α*-Phenyl-*γ*-veratrylbutyric acid, 1416.
$C_{18}H_{22}O$ *aa*-Diphenyl-*β*-methyl-*n*-amyl alcohol, 1218.
5-Ketodecahydro-1:2-benzanthracene, 768.
$C_{18}H_{22}O_2$ Dodecahydro-5:6:7:8-dibenz-1:4-naphthaquinone, 1106.
$C_{18}H_{22}O_3$ *β*-6-*as*-Octahydrophenanthroylpropionic acid, 768.
$C_{18}H_{22}O_4$ 3:3′-Dimethoxyhydrobenzoin *aa*′-dimethyl ether, 1537.
$C_{18}H_{21}N$ Benzylidene-*p*-*tert*.-butylbenzylamine, 1848.
p-*tert*.-Butylbenzylidenebenzylamine, 1848.
$C_{18}H_{22}S$ Di-(*α*-benzylethyl) sulphide, 1084.
(−)*β*-Phenyl*iso*propyl disulphide, 1083.
$C_{18}H_{24}O_2$ *γ*-6-*as*-Octahydrophenanthrylbutyric acid, 768.
$C_{18}H_{24}O_4$ Carvomenthyl hydrogen phthalates, 1140.
$C_{18}H_{24}O_{12}$ Methyl *cyclo*hexane-1:1:4:4:5-hexacarboxylate, 192.
$C_{18}H_{26}O_4$ *α*- and *β*-Santalylmalonic acids, 313.
$C_{18}H_{27}N_3$ 8-(*β*-Diethylaminodiethylaminomethyl)quinoline, and its salts, 1425.
$C_{18}H_{28}O_2$ *β*-Keto-*δ*-hydroxy-*θ*-(2:2:6-trimethyl-Δ^6-*cyclo*hexenyl)-*ζ*-methyl-$\Delta^{\zeta\eta}$-octadiene, 587.
$C_{18}H_{28}O_2$ Licanic acids, 1632.
$C_{18}H_{30}O_3$ 2-(*β*-Carbomethoxypropionyl)-1-*n*-octyl-Δ^1-*cyclo*pentene, 1543.
$C_{18}H_{30}O_6$ Ethyl 1-carbethoxy-4-methyl*cyclo*hexane-2-succinate, 479.
$C_{18}H_{30}O_8$ Ethyl *β*-methylpentane-*βδδε*-tetracarboxylate, 1128.
$C_{18}H_{32}O_4$ 1:2-*cyclo*Hexanediol-*l*-menthoxyacetates, 1271.
$C_{18}H_{40}Pb$ Di-*n*-butyldiamyl-lead, 42.
$C_{18}H_{40}Sn$ *n*-Propyltri-*n*-amyltin, 41.

18 III

$C_{18}H_{10}O_7N_4$ 3-Nitro-6-dinitrophenylphenoxazine, 1313.
$C_{18}H_{10}O_{11}N_6$ 2′:4′-Dinitro-2-picrylaminodiphenyl ether, 1311.
$C_{18}H_{11}O_9N_5$ *ON*-Bis-2:4-dinitrophenyl-*o*-aminophenol, 1313.
$C_{18}H_{12}O_6N_2$ 5-Keto-2-phenyl-4-(2′-nitro-5′-acetoxybenzylidene)-4:5-dihydro-oxazole, 1267.
$C_{18}H_{14}O_4N_2$ *r*- and (−)-*o*-*β*-Naphtholazomandelic acids, 107.
$C_{18}H_{14}O_5S$ 1-Anthraquinonyl *β*-acetoxyethyl sulphoxide, 1237.
$C_{18}H_{14}O_6S$ 1-Anthraquinonyl-*β*-acetoxyethylsulphone, 1236.
$C_{18}H_{15}O_2Br$ *cis*-*β*-*p*-Bromophenyl-*α*-1-hydroxyhydrindene-2-propionolactones, 16.
$C_{18}H_{15}O_2N$ 3:6:9-Triacetylcarbazole, 742.
$C_{18}H_{15}O_2N_3$ 2:5-Diketo-3-(2′-acetamidophenyl)*iso*indolinopyrazolidocoline, 1801.

$C_{18}H_{16}O_2N_4$ 1-Ketotetrahydrocarbazole *p*-nitrophenylhydrazone, 976.
$C_{18}H_{17}O_3Br$ *trans*-β-*p*-Bromophenyl-α-1-hydroxyhydrindene-2-propionic acid, 16.
$C_{18}H_{17}O_5N_3$ Methyl 1-keto-3-(2′-nitrophenyl)-2-methyltetrahydrophthalazine-4-acetate, 1804.
$C_{18}H_{17}O_7N$ Nitro-β-veratroyl-α-phenylpropionic acid, 1415.
$C_{18}H_{18}O_5Cl_4$ 2:3-Bisdichloroacetyl benzylidene α- and β-methylglucosides, 1180.
$C_{18}H_{19}ON_3$ 2-(β-1′-Naphthylethyl)-Δ^2-*cyclo*pentenone semicarbazone, 1571.
$C_{18}H_{20}O_2N_2$ Dibenzyl*iso*butylenediamine, 843.
$C_{18}H_{20}O_3N_2$ β-*p*-Anisidinocrotono-*p*-anisidide, 113.
$C_{18}H_{20}O_3S$ Ethyl *d*-(+)-β-*p*-toluenesulphinoxy-β-phenylpropionate, 1666.
$C_{18}H_{21}ON$ 4-Diethylamino-3-methylbenzophenone, 896.
$C_{18}H_{21}O_3N$ α-Acetamidodi-(*o*-methoxybenzyl), 1122.
$C_{18}H_{21}O_4N$ Acetyl derivative of *iso*di-*o*-methoxyphenylhydroxyethylamine, 1121.
$C_{18}H_{24}O_4N_2$ Ethyl phenylenebis-β-aminocrotonates, 1569.
$C_{18}H_{25}O_4N$ Retrorsine, and its salts, 13.
$C_{18}H_{26}O_2N_4$ 1:3-Di-(α-methyl-Δ^β-pentenyl)-7-methylxanthine, 1366.
$C_{18}H_{27}O_4N$ Ethyl benzyl-β-dimethylaminoethylmalonate, hydrochloride of, 724.
$C_{18}H_{27}O_5N_3$ β-Keto-δ-teresantalylbutylmalonic acid semicarbazone, 313.
$C_{18}H_{29}O_3N_3$ Methyl γ-keto-ε-teresantalylhexoate semicarbazone, 314.

18 IV

$C_{18}H_6ON_2Br_2$ 3:5-Dibromobenzeneazophenols, 1006.
$C_{18}H_{10}ON_4Cl_4$ 3:5:3′:5′-Tetrachloro-2:4-bisbenzeneazophenol, 1006.
$C_{18}H_{10}ON_4Br_4$ 3:5:3′:5′-Tetrabromo-2:4-bisbenzeneazophenol, 1006.
$C_{18}H_{10}ON_4S$ Thiolhydroxyphenanthrapyrimidazine, 469.
$C_{18}H_{11}O_5N_3S$ 2-Nitro-2′-picrylamidodiphenyl sulphoxide, 186.
$C_{18}H_{14}O_3N_2Cl$ 2:5-Diketo-3-(4′-chloro-2′-acetamidophenyl)*iso*indolinopyrazolidocoline, 1802.
$C_{18}H_{14}O_4N_2S_2$ 2-Nitro-2′-benzenesulphonylaminodiphenyl sulphide, 184.
$C_{18}H_{14}O_4N_4As$ 5:5′-Arsenocarboxymethylbenziminazole, 156.
$C_{18}H_{14}O_5N_2S_2$ 2-Nitro-2′-benzenesulphonamidodiphenylsulphone, 185.
$C_{18}H_{14}O_6N_3Br$ 1-Acetoxy-3-(2′-bromo-4′-nitrophenyl-)3:4-dihydrophthalazine-4-acetic acid, 1136.
$C_{18}H_{16}O_2N_4As_2$ 5:5′-Arsenocarbamylmethylbenziminazole, 157.
$C_{18}H_{16}O_4N_3Br$ 1-Acetoxy-3-(2′-bromo-4′-aminophenyl)-3:4-dihydrophthalazine-4-acetic acid, 1136.
$C_{18}H_{16}O_5N_3Cl$ Methyl 1-keto-3-(chloro-2′-nitrophenyl)-2-methyltetrahydrophthalazine-4-acetates, 1804.
$C_{18}H_{16}O_5N_3Br$ Methyl 1-keto-3-(2′-bromo-4′-nitrophenyl)-2-methyltetrahydrophthalazine-4-acetate, 1136.
$C_{18}H_{16}N_2Cl_4Fe$ Quinolinium ferrochloride (+$2H_2O$), 116.
$C_{18}H_{16}N_2Br_4Fe$ Quinolinium ferrobromide (+$2H_2O$), 116.
$C_{18}H_{17}O_2NCl_2$ Diacetyl derivative of *dl-iso*di-*o*-chlorophenylhydroxyethylamine, 1123.
$C_{18}H_{19}ON_2I$ *p*-Acetamidobenzyltrimethylammonium iodide, 872.
$C_{18}H_{19}ON_3Si$ Tri-*m*-aminotriphenylsilicol, 1087.
$C_{18}H_{20}O_4N_2Se_2$ Bis-*o*-urethanophenyl diselenide, 1765.
$C_{18}H_{20}O_7N_2As$ Benzyldimethylallylarsonium picrate, 398.
$C_{18}H_{22}O_7N_2As$ Benzyldimethyl-*n*-propylarsonium picrate, 397.
Benzylmethyldiethylarsonium picrate, 398.
$C_{18}H_{22}O_3N_2As$ Benzylmethyldiethylarsonium styphnate, 398.
$C_{18}H_{23}O_2NS$ *p*-Toluenesulphonyl-β-anilino-γ-methylbutane, 1280.
$C_{18}H_{28}N_4Cl_2Pt$ *meso*-Stilbenediamino*iso*butylenediaminoplatinous chlorides, 843.
$C_{18}H_{28}N_4I_2Pt$ *meso*-Stilbenediamino*iso*butylenediaminoplatinous iodides, 843.
$C_{18}H_{30}O_2N_4Pt$ Stilbenediamino*iso*butylenediaminoplatinous hydroxide, salts, resolution of, 839.
$C_{18}H_{36}N_2S_4Ni$ Nickel *NN*-di-*n*-butyldithiocarbamate, 624.
$C_{18}H_{42}Cl_2P_2Pd$ Bis(tri-*n*-propylphosphine)palladium dichloride, 1560.
$C_{18}H_{42}Cl_2As_2Pd$ Bis(tri-*n*-propylarsine)palladium dichloride, 1561.
$C_{18}H_{42}Br_2As_2Pd$ Bis(tri-*n*-propylarsine)palladium dibromide, 1561.

18 V

$C_{18}H_{16}O_4N_4Cl_2Ni$ Nickel *p*-chlorophenylmethylglyoxime, 623.
$C_{18}H_{24}O_4N_2P_2Pd$ Bis(tri-*n*-propylphosphine)palladium dinitrite, 1560.

18 VI

$C_{18}H_{13}O_4N_2ClSHg$ 2-*o*-Nitrophenylbenzenesulphonamidophenyl mercurichloride, 187.

C_{19} Group.

$C_{19}H_{14}$ 2-Methylnaphthacene, 80.
$C_{19}H_{16}$ Triphenylmethane, parachor of, 207.
$C_{19}H_{18}$ 9:3′-Dimethyl-1:2-*cyclo*pentenophenanthrene, 445.
2-Methyl-1:2:3:4-tetrahydronaphthacene, 82.
$C_{19}H_{20}$ 2-Methyl-1-Δ^γ-butenyl-3:4-dihydrophenanthrene, 1635.
$C_{19}H_{22}$ 1:9-Dimethyl-1:2-*cyclo*pentano-1:2:3:4-tetrahydrophenanthrene, 444.
2-Methyl-(β-1′-naphthylethyl)-Δ^1-*cyclo*hexene, 671.
Methyloctahydrochrysene, 671.

19 II

$C_{19}H_{12}O_3$ Methyl benzanthrone-8-carboxylate, 574.
$C_{19}H_{14}O$ Substance, from α-hydrindene and 1-bromo-2-naphthylmagnesium iodide, 771.

$C_{19}H_{14}O_2$ 2-Hydroxynaphthylideneacetophenone, 1164.
$C_{19}H_{14}O_3$ 1-Acetyl-2-naphthyl benzoate, 870.
α-Naphthaflavone, 870.
$C_{19}H_{14}O_4$ Methyl hydrogen 8-(*o*-carboxyphenyl)-1-naphthoate, 572.
$C_{19}H_{14}O_9$ Stictic acid, 1380.
$C_{19}H_{16}O_4$ Ethyl 2-(3′-carboxy-4′-hydroxybenzylidene)-1-hydrindone, 945.
$C_{19}H_{16}O_5$ 7-(β-Acetoxyethoxy)flavone, 1100.
$C_{19}H_{16}O_6$ 5:7:8′-Trimethoxychromenochromone, 996.
$C_{19}H_{16}O_{10}$ Stictinic acid, 1381.
$C_{19}H_{18}O$ 7-Methoxymethyl-1:2-*cyclo*pentenophenanthrenes, 450, 453.
$C_{19}H_{18}O_2$ 1:4-Dimethylanthranylpropionic acid, 1103.
1-*cis*-γ-Phenyl-α-1-hydroxyhydrindene-2-butyrolactones, 15.
$C_{19}H_{18}O_3$ 1:4-Dimethylanthronylpropionic acid, 1103.
$C_{19}H_{18}O_5$ 2-Hydroxy-4-(β-acetoxyethoxy)chalkone, 1100.
$C_{19}H_{18}O_6$ 2′-Hydroxy-4′-(β-acetoxyethoxy)flavylium hydroxide, and its salts, 1100.
$C_{19}H_{18}O_7$ *O*-Trimethylpeltogynic acid, 751.
$C_{19}H_{20}O$ 6-Benzoyl-2:7-dimethyl-1:2:3:4-tetrahydronaphthalene, 82.
6-(2′:4′-Dimethyl)benzoyl-1:2:3:4-tetrahydronaphthalene, 80.
$C_{19}H_{20}O_3$ *trans*-γ-Phenyl-α-1-hydroxyhydrindene-2-butyric acid, 15.
$C_{19}H_{20}O_4$ αγ-Dianisoylpropane, 856.
$C_{19}H_{20}O_5$ Methyl β-veratroyl-α-phenylpropionate, 1415.
$C_{19}H_{20}O_6$ *O*-Trimethylpeltogynol, 749.
$C_{19}H_{20}O_6$ 6-Methoxyphenoxyacetic acid-2-*O*-dimethylphloracetophenones, 996
$C_{19}H_{32}O_2$ Equilin methyl ether, 451.
2-Keto-10-methoxydecahydrochrysene, 1287.
$C_{19}H_{32}N_2$ α-Diethylamino-δ-aminopentane, and its dipicrate, 1409.
$C_{19}H_{24}O$ α-Methoxy-αα-diphenyl-β-methylpentane, 1218.
$C_{19}H_{26}O_6$ Ethyl δ-phenyl-*n*-butene-αβγ-tricarboxylate, 1360.
$C_{19}H_{27}N_3$ 8-(β-Piperidinodiethylaminomethyl)quinoline, trihydrobromide of, 1426.
$C_{19}H_{30}O_3$ Ethyl β-hydroxy-ζ-(2:2:6-trimethyl-Δ^6-*cyclo*hexenyl)-δ-methyl-$\Delta^{\gamma\epsilon}$-hexadiene-α-carboxylate, 586.
Methyl licanate, 1633.
$C_{19}H_{32}O_6$ Ethyl 1-carbethoxy-4-methyl*cyclo*hexane-2-α-glutarate, 478.
Ethyl 1-carbethoxy-4-methyl*cyclo*hexane-2-α′-methylsuccinate, 479.

19 III

$C_{19}H_{12}O_8N_4$ 2′:4-Dinitro-2-hydroxydiphenylamine *o*-nitrobenzoate, 1311.
2′:4′-Dinitro-2-*o*-nitrobenzoylaminodiphenyl ether, 1311.
$C_{19}H_{13}ON$ 2-Benzoylcarbazole, 744.
$C_{19}H_{15}OAs$ 10-Phenyl-2-methylphenoxarsine, 1052.
$C_{19}H_{16}O_7N_4$ 4-Methoxycinnamylidenepyruvic acid 2:4-dinitrophenylhydrazone, 1053.
$C_{19}H_{17}ON$ 4-Benzoyldimethyl-α-naphthylamine, 896.
3:6-Dimethyl-2-naphthanilide, 79.
$C_{19}H_{17}O_5N$ 3:11-Dimethoxyoxyprotoberberine, 294.
$C_{19}H_{17}O_4N$ 6:7:3′:4′-Bismethylenedioxy-8:6′-methylene-1:2:3:4-tetrahydroprotopapaverine, 666.
$C_{19}H_{17}O_5N$ 3-Keto-6:7-methylenedioxy-2-β-piperonylethyl-1:2:3:4-tetrahydro*iso*quinoline, 665.
$C_{19}H_{18}ON_2$ 4-Benzoyldimethyl-α-naphthylamine oxime, 896.
$C_{19}H_{18}O_4N_2$ 6-β-Piperonylethylaminomethylhomopiperonylonitrile, 665.
$C_{19}H_{18}O_6N_2$ ζ-Phenyl-Δ^α-hexenol 3:5-dinitrobenzoates, 432.
$C_{19}H_{18}O_6Br_2$ Bromocyanidin tetramethyl ether bromide, 428.
$C_{19}H_{15}O_{12}B_2$ Methylnaphthazarin diboroacetate, 335.
$C_{19}H_{19}O_2N$ Phthalo-*p-tert.*-butylbenzylimide, 1848.
$C_{19}H_{19}O_4N$ 6:7:3′:4′-Bismethylenedioxy-2- and 6′-methyl-1:2:3:4-tetrahydroprotopapaverines, and their picrates, 666.
5-Methoxyhomophthalo-β-*m*-methoxyphenylethylimide, 294.
$C_{19}H_{19}O_5N$ 6-Methylhomopiperonyl-β-piperonylethylamine, 666.
$C_{19}H_{19}O_5Cl$ *O*-Tetramethylfisetinidin chloride, 751.
$C_{19}H_{19}O_6N$ 6-Hydroxymethylhomopiperonoyl-β-piperonylethylamine, 665.
$C_{19}H_{21}O_3N$ Dibenzoylvalinol, 414.
$C_{19}H_{21}O_5N$ 5-Methoxyhomophthalo-β-*m*-methoxyphenylethylamic acid, 294.
$C_{19}H_{22}O_2N_2$ Apoquinidine, 969.
*iso*Apoquinine, and its salts, 967.
$C_{19}H_{23}N_2Br$ 3-Bromo-9-β-diethylaminoethylaminophenanthridine, and its salts, 1409.
$C_{19}H_{24}O_2N_2$ Hydroxydihydroapoquinine, 968.
$C_{19}H_{24}O_4N_4$ 3-Methyl altrosazone, 1200.
5-Methyl glucosazone, 1400.
$C_{19}H_{25}O_6N$ Ethyl 1-carbethoxy-4-methyl*cyclo*hexane-2-α-cyanosuccinate, 479.
$C_{19}H_{31}O_2N_3$ Licanic acid semicarbazones, 1633.

19 IV

$C_{19}H_{11}O_8N_4Cl$ 5-Chloro-2′:4′-dinitro-2-hydroxydiphenylamine nitrobenzoates, 1312.
4-Chloro-2′:4′-dinitro-2-nitrobenzamidodiphenyl ethers, 1312.
$C_{19}H_{11}O_8N_4Br$ 5-Bromo-2′:4′-dinitro-2-hydroxydiphenylamine nitrobenzoates, 1311.
4-Bromo-2′:4′-dinitro-2-nitrobenzamidodiphenyl ethers, 1312.
$C_{19}H_{11}O_8N_4I$ 5-Iodo-2′:4′-dinitro-2-hydroxydiphenylamine *o*-nitrobenzoate, 1311.

$C_{19}H_{13}O_3N_2S$ 3-Nitro-6-benzoylthiodiphenylamine, 342.
$C_{19}H_{12}O_6N_3Br$ 4-Bromo-2′:4′-dinitro-2-benzamidodiphenyl ether, 1312.
$C_{19}H_{13}O_7N_4S$ 2-Benzamidophenyl picryl sulphide, 342.
$C_{19}H_{13}O_3NS$ Benzenesulphonimidoxanthen, 532.
$C_{19}H_{12}O_5N_2S$ 2:4-Dinitro-2′-benzamidodiphenyl sulphide, 342.
2-Nitro-2′-*o*-nitrobenzoylaminodiphenyl sulphide, 184.
$C_{19}H_{14}O_3N_2S$ 2-Nitro-2′-benzamidodiphenyl sulphide, 341.
$C_{19}H_{14}O_5N_2S$ 2-Nitro-2′-benzamidodiphenylsulphone, 342.
5-Nitro-1-*p*-hydroxyphenyl-2-phenylbenzthiazoline *S*-dioxide, 1265.
$C_{19}H_{16}O_3N_2S$ 2-Aceto-*o*-nitroanilido-1-naphthyl methyl sulphide, 187.
$C_{19}H_{18}O_6N_2S_2$ 2-*o*-Nitroanilinobenzenesulphonylphenylmethylsulphone, 186.
2-Nitro-2′-benzenesulphonylmethylaminodiphenylsulphone, 185.
$C_{19}H_{23}ON_2Cl$ α- and α′-Chlorodihydrocinchonidines, and their salts, 1097.
α- and α′-Chlorodihydrocinchonines, and their salts, 1096.
$C_{19}H_{24}O_5N_2As_2$ Pimelanilido-*pp*′-diarsonic acid, and its disodium salt, 292.
$C_{19}H_{25}O_2NS$ *p*-Toluenesulphonamido-*tert.*-hexylbenzene, 1281.

19 V

$C_{19}H_{13}O_2N_2IS$ 2-*o*-Nitrophenyl-1-phenylthiazolinium iodide, 1264.
$C_{19}H_{14}O_7N_2BrS$ 5-Bromo-2′:4′-dinitro-2-hydroxydiphenylamine *p*-toluenesulphonate, 1311.
$C_{19}H_{16}O_2NIS$ 3-Iodo-*p*-toluenesulphonamidodiphenyls, 1596.

C_{20} Group.

$C_{20}H_{14}$ Cholanthrene, synthesis of, 667, 770.
$C_{20}H_{16}$ 2:7-Dimethylnaphthacene, 77.
$C_{20}H_{18}$ 1:2:3:4-Di*cyclo*pentenoanthracene, 1107.
3:4:3′:4′-Tetrahydro-1:1′-dinaphthyl, 1107.
$C_{20}H_{20}$ 2:6- and 2:7-Dimethyl-1:2:3:4-tetrahydronaphthacenes, 82.
$C_{20}H_{24}$ 1:9:3′-Trimethyl-1:2-*cyclo*pentano-1:2:3:4-tetrahydrophenanthrene, 444.
$C_{20}H_{28}$ 2:11-Dimethylchrysene, 1414.
Dodecahydrocholanthrene, 769.

20 II

$C_{20}H_{12}O_4$ 1:2-Benzanthraquinonyl-5-acetic acid, 771.
$C_{20}H_{14}O_2$ 2:7-Dimethylnaphthacene-9:10-quinone, 80.
$C_{20}H_{14}O_3$ 2′-Methoxy-β-naphthaflavone, 870.
$C_{20}H_{16}O_2$ 1:2:3:4-Di*cyclo*pentenoanthraquinone, 1107.
β-1-Hydrindyl-α-naphthoic acid, 771.
$C_{20}H_{16}O_4$ 1-Acetyl-2-naphthyl *o*-methoxybenzoate, 870.
Methyl 8-(*o*-carbomethoxyphenyl)-1-naphthoate, 571.
$C_{20}H_{18}O$ 2-*p*-Toluoyl-3:6-dimethylnaphthalene, 79.
$C_{20}H_{18}O_4$ 2:11-Diketo-6:15-dimethoxyhexahydrochrysene-*a*, 1413.
2:11-Diketo-5:14-dimethoxyhexahydrochrysene-*b*, 1413.
$C_{20}H_{18}O_5$ Anthronylidenedipropionic acid, 1103.
$C_{20}H_{18}O_6$ 4′-Methoxy-7-(β-acetoxyethoxy)flavone, 1101.
$C_{20}H_{18}N_2$ *N*-Benzhydryl-*N*′-phenylformamidine, 1219.
$C_{20}H_{20}O$ 7-Methoxy-3:3′-dimethyl-1:2-*cyclo*pentenophenanthrene, 450.
$C_{20}H_{20}O_2$ Tetrahydro-1:2:3:4-di*cyclo*pentenoanthraquinone, 1107.
$C_{20}H_{20}O_3$ 2-(β-Benzoyl-α-*o*-hydroxyphenylethyl)*cyclo*pentanone, 1118.
$C_{20}H_{20}O_4$ 6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene, 640.
1:2-*cyclo*Hexanediol dibenzoates, 1271.
$C_{20}H_{20}O_6$ 2-Hydroxy-4-(β-acetoxyethoxy)-4′-methoxychalkone, 1100.
$C_{20}H_{22}O$ *p*-Toluoyldimethyl-1:2:3:4-tetrahydronaphthalenes, 82.
$C_{20}H_{22}O_2$ 1:1′-Dihydroxyoctahydro-1:1′-dinaphthyl, 1107.
6:15-Dimethoxyhexahydrochrysene, 1413.
5:14-Dimethoxyhexahydrochrysene-*b*, 1413.
$C_{20}H_{22}O_3$ Ethyl 2-β-naphthylmethyl*cyclo*hexanone-2-carboxylate, 1322.
$C_{20}H_{22}O_4$ Butyl hydrogen diphenylsuccinates, 158.
5:8-Dihydro-5:6:7:8-di*cyclo*pentenonaphthaquinyl diacetate, 1106.
$C_{20}H_{22}O_6$ βγ-Dianisyladipic-*b* acid, 1413.
βγ-Di-3-methoxyphenyladipic-*a* acid, 1413.
O-Tetramethylpeltogynol, 749.
$C_{20}H_{22}O_9$ 4:5-Dimethoxyphenoxyacetic acid-2-(2′:4′-*O*-dimethyl)phloracetophenone, 684
$C_{20}H_{24}O$ Ketododecahydrocholanthrene, 769.
7-Methoxy-1:3′-dimethyl-1:2:3:4-tetrahydro-1:2-*cyclo*pentenophenanthrene, 453.
1-(β-6′-Methoxy-1′-naphthylethyl)-2:5-dimethyl-Δ^1-*cyclo*pentene, 453.
$C_{20}H_{24}O_2$ Dodecahydro-1:2-benzanthryl-5-acetic acid, 769.
$C_{20}H_{24}O_3$ Methyl 2-β-1′-naphthylethyl-1-methyl*cyclo*pentan-2-ol-1-carboxylate, 1531.
$C_{20}H_{26}O$ 2:5-Dimethyl-1-β-(4-methyl-1-naphthyl)ethyl*cyclo*pentan-1-ol, 444.
$C_{20}H_{26}O_2$ αζ-Di-*p*-anisylhexane, 1092.
$C_{20}H_{29}N_3$ 8-(β-Piperidinoethylpropylaminomethyl)quinoline, and its trihydrobromide, 1426.
$C_{20}H_{44}Pb$ Tetra-*n*- and -*dl*-amyl-lead, 42.
$C_{20}H_{44}Sn$ Tetra-amyltin, 41.

20 III

$C_{20}H_{12}O_4Br_2$ 4:6-Dibromoresorcinol dibenzoate, 948.
$C_{20}H_{13}O_3N$ 4-Benzoylnaphthalomethylimide, 499.
$C_{20}H_{13}O_4N_3$ 2-Nitro-1-hydroxynaphthalene-4-azo-β-naphthol, 673.
$C_{20}H_{14}O_{10}N_6$ 2′:4′-Dinitro-5-acetodinitroanilido-2-hydroxydiphenylamine, 198.
$C_{20}H_{15}O_4N$ Nitrobenzoylphenyl *p*-tolyl ethers, 1238.
$C_{20}H_{15}O_7N_5$ 2-Nitro-5-benzyloxybenzaldehyde 2:4-dinitrophenylhydrazone, 1266.
$C_{20}H_{15}N_4Cl$ 7-Chloro-2:3-diphenyl-5-ethylpyrimidazine, 1284.
$C_{20}H_{16}O_{12}N_4$ 1:2-*cyclo*Hexanediol bisdinitrobenzoates, 1271.
$C_{20}H_{16}N_2Se_2$ Bis-2-amino-α-naphthyl diselenide, 1766.
$C_{20}H_{17}O_5N_3$ 2-Nitro-5-benzyloxybenzaldehyde phenylhydrazone, 1266.
$C_{20}H_{17}N_3Cl$ *N*-Benzhydryl-*N*′-*p*-chlorophenylformamidine, 1219.
$C_{20}H_{18}O_4Cu$ Copper benzoylacetonate, 733.
$C_{20}H_{18}O_6N_2$ 1:2-*cyclo*Hexanediol dinitrobenzoate-benzoates, 1271.
$C_{20}H_{19}O_4Br$ *trans*-β-*p*-Bromophenyl-α-1-acetoxyhydrindene-2-propionic acid, 16.
$C_{20}H_{19}O_6N$ 5:6-Dimethoxyhomophthalo-β-piperonylethylimide, 294.
$C_{20}H_{20}O_6N_2$ ζ-Phenyl-δ-methyl-Δ^{α}-hexen-δ-ol 3:5-dinitrobenzoate, 432.
$C_{20}H_{20}O_7N_2$ ζ-*m*-Methoxyphenyl-Δ^{α}-hexen-γ-ol 3:5-dinitrobenzoate, 435.
$C_{20}H_{21}O_6N$ 6-Methoxymethylhomopiperonyl-β-piperonylethylamine, 665.
$C_{20}H_{21}O_7N$ 5:6-Dimethoxyhomophthalo-β-piperonylethylamic acid, 295.
$C_{20}H_{22}O_3N_2$ Ethyl 4-acetamidodiphenyl-4′-β-aminocrotonate, 1570.
$C_{20}H_{23}O_6N_3$ Ethyl 4-(6′-nitro-3′:4′-methylenedioxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylate, 818.
$C_{20}H_{23}O_5N$ Diacetyl derivative of *iso*di-*o*-methoxyphenylhydroxyethylamine, 1121.
Methyl 5-methoxyhomophthalo-β-*m*-methoxyphenylethylamate, 294.
$C_{20}H_{23}O_6N$ Ethyl 4-(3′:1′-methylenedioxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylate, 818.
$C_{20}H_{23}O_9N_5$ *l*-Eseroline methopicrate, 758.
$C_{20}H_{24}ON_2$ β-Xylidinocrotonoxylidides, 113.
$C_{20}H_{24}O_2N_2$ Apoquinidine methyl ether, and its salts, 971.
β-*iso*Quinidine, 970.
$C_{20}H_{24}O_3N_2$ β-*p*-Phenetidinocrotono-*p*-phenetidide, 113.
$C_{20}H_{24}O_6N_2$ 2-Hydroxy-4-(β-hydroxyethoxy)acetophenoneazine, 1099.
$C_{20}H_{24}O_8N_2$ Ethyl 4-(nitrohydroxy-3′-methoxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylates, 817.
$C_{20}H_{25}ON_3$ 2-Methoxy-9-β-diethylaminoethylaminophenanthridine, and its salts, 1409.
$C_{20}H_{25}O_2N$ Methyl 2-β-1′-naphthylethyl-1-methyl*cyclo*pentan-2-ol-1-carboxylamide, 1532.
$C_{20}H_{25}O_6N$ Ethyl 4-(hydroxymethoxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylates, 817.
$C_{20}H_{26}N_2Si$ Di-*m*-acetamidodiphenyldiethylsilicane, 1091.
$C_{20}H_{29}O_{11}I$ 1-(α-Iodo*iso*hexoyl)tetra-acetyl glucose, 1024.
$C_{20}H_{31}O_6N$ Ethyl 1-carbethoxy-4-methyl*cyclo*hexane-2-α-(α-cyanoglutarate), 478.
Ethyl 1-carbethoxy-4-methyl*cyclo*hexane-2-(α-cyano-α′-methylsuccinate), 479.
$C_{20}H_{40}N_4Au$ Diethylcyanogold, 1028.

20 IV

$C_{20}H_{12}O_6N_2S_2$ 3:3′-Dinitro-4:4′-dihydroxydinaphthyl disulphide, 673.
$C_{20}H_{13}O_4NS$ Benzoylnitrophenyl 4-hydroxy-*m*-tolyl sulphides, 1238.
$C_{20}H_{13}O_5N_3S$ 2-*o*-Nitrobenzo-*o*-nitroanilidophenyl methyl sulphide, 188.
2-Nitro-2′-methyl-*o*-nitrobenzamidodiphenyl sulphide, 185.
$C_{20}H_{13}O_6NS$ Benzoylnitrophenyl-4-hydroxy-*m*-tolylsulphones, 1238.
$C_{20}H_{16}O_3N_2S$ 2-*o*-Nitrophenylbenzamidophenyl methyl sulphide, 342.
$C_{20}H_{16}O_5N_2S$ 2-*o*-Nitrophenylbenzamidophenylmethylsulphone, 342.
$C_{20}H_{18}OIAs$ 10-Phenyl-2-methylphenoxarsine, 1052.
$C_{20}H_{22}O_6NCl$ Ethyl 4-(6′-chloro-3′:4′-methylenedioxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylate, 818.
$C_{20}H_{22}O_6NBr$ Ethyl 4-(6′-bromo-3′:4′-methylenedioxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylate, 818.
$C_{20}H_{25}O_2N_2Cl$ α- and α′-Chlorodihydroquinidines, and their salts, 1097.
α- and α′-Chlorodihydroquinines, and their salts, 1095.
$C_{20}H_{26}O_6N_2As_2$ Suberanilide-*pp*′-diarsonic acid, and its disodium salt, 293.
$C_{20}H_{28}O_2Cl_2Hg$ Bis-3-chlorocamphor-10-mercury, 536.
$C_{20}H_{28}O_2Br_2Hg$ Bis-3-bromocamphor-10-mercury, 536.
$C_{20}H_{28}Cl_2S_2Pd$ Bis(phenylbutylsulphide)palladium dichlorides, 1559.
$C_{20}H_{44}Cl_2S_2Pd$ Bis(di-*n*-amylsulphide)palladium dichloride, 1558.

20 V

$C_{20}H_{44}O_4N_2S_2Pd$ Bis(di-*n*-amylsulphide)palladium dinitrite, 1559.

C_{21} Group.

$C_{21}H_{14}$ 1:2:5:6-Dibenzfluorene, 1325.
1′:2′-Naphtha-2:3-fluorene, 1324.
$C_{21}H_{18}$ 5-*n*-Propyl-1:2-benzanthracene, 770.
$C_{21}H_{24}$ 2-Methyl-(β-1′-acenaphthylethyl)-Δ^1-*cyclo*hexene, 670.

21 II

$C_{21}H_{12}O$ 1′:2′-Naphtha-2:3-fluorenone, 1324.
$C_{21}H_{14}O_2$ 2-Styryl-1:4-α-naphthapyrone, 870.
3-Styryl-1:4-βα-naphthapyrone, 868.
$C_{21}H_{16}O_2$ 5-*n*-Propyl-1:2-benzanthracene, 770.
3-Styryl-2:3-dihydro-1:4-βα-naphthapyrone, 868.
$C_{21}H_{16}O_3$ 2-Acetyl-1-naphthyl cinnamate, 870.
ω-Cinnamoyl-2-acetyl-1-naphthol, 870.
$C_{21}H_{17}N_3$ 3-Benzeneazo-2-phenylmethylindoles, 1211.
$C_{21}H_{18}O_3$ 2-Phenylnaphthapyranol 4-ethyl ether, 1164.
$C_{21}H_{18}O_3$ 3:4-Dibenzyloxybenzaldehyde, 867.
$C_{21}H_{18}O_7$ β-(3:4:5-Trimethoxybenzoyl)-α-(3′:4′-methylenedioxybenzylidene)propiono-γ-lactone, 1580.
$C_{21}H_{18}O_9$ Trimethylstictic acid, 1381.
$C_{21}H_{19}N$ Benzhydrylidene-α-phenylethylamines, 1782.
$C_{21}H_{20}O$ 3-Keto-1-phenyl-11-methylhexahydrophenanthrene, 1287.
$C_{21}H_{30}O_2$ Hexahydrocholanthrenecarboxylic acid, 670.
$C_{21}H_{20}O_3$ 2-Acetoxy-4-(β-acetoxyethoxy)chalkone, 1100.
β-3:4-Dimethoxybenzoyl-α-(3′:4′-dimethoxybenzylidene)propionic lactone, 640.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-3-carboxylic acid, 640.
$C_{21}H_{20}O_7$ γ-Di-(3:4-dimethoxyphenyl)itaconic anhydride, 641.
1-Keto-5:6-dimethoxy-3-(3′:4′-dimethoxylphenyl)indene-2-acetic acid, 641.
$C_{21}H_{20}O_8$ β-(3:4:5-Trimethoxybenzoyl)-α-(3′:4′-methylenedioxybenzylidene)propionic acid, 1580.
$C_{21}H_{20}N_2$ *N*-Benzhydryl-*N*′-*p*-tolylformamidine, 1219.
$C_{21}H_{22}O_2$ 2-(β-Benzoyl-α-*o*-hydroxyphenylethyl)*cyclo*hexanone, 1117.
11-Hydroxy-9-phenacylhexahydroxanthen, 1117.
$C_{21}H_{22}O_6$ Diphenylglycerol triacetate, 85.
$C_{21}H_{22}O_7$ β-3:4-Dimethoxybenzoyl-α-(3′:4′-dimethoxybenzylidene)propionic acid, 640.
4-Keto-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, 641.
$C_{21}H_{22}O_8$ γ-Di-(3:4-dimethoxyphenyl)itaconic acid, 641.
$C_{21}H_{24}O_4$ α-(β′-1-Acenaphthylethyl)pimelic acid, 669.
αγ-Diphenetoylpropane, 856.
$C_{21}H_{24}O_5$ 5:6-Dimethoxy-3-(3′:4′-dimethoxyphenyl)hydrindene-2-acetic acid, 641.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, 641.
$C_{21}H_{24}O_6$ Bis-(3:4-dimethoxyphenyl)methylsuccinic acid, 641.
$C_{21}H_{28}O_2$ Substance, from clovenic anhydride and magnesium phenyl bromide, 1298.
$C_{21}H_{31}N_3$ 8-(β-Piperidinoethylbutylaminomethyl)quinolines, and their salts, 1426.

21 III

$C_{21}H_{13}O_3Cl$ 7-Hydroxy-3:4-coumareno(2″:3″)-flavylium chloride, 944.
$C_{21}H_{13}O_4Cl$ 7:6′-Dihydroxy-4-phenyl-2:3-coumareno(3′:2′)-chromylium chloride, 943.
$C_{21}H_{14}O_3S$ 1-Anthraquinonyl 4-hydroxy-*m*-tolyl sulphide, 1235.
$C_{21}H_{14}O_5S$ 1′-Anthraquinonyl-4-hydroxy-*m*-tolylsulphone, 1236.
1-Anthraquinonyl 3-sulphino-*p*-tolyl ether, 1236.
$C_{21}H_{14}N_2S$ 1:3-Diphenyl-4:5-thionaphthenopyrazole, 473.
$C_{21}H_{15}O_2N$ Benzoylacetylcarbazoles, 744.
$C_{21}H_{15}O_3Cl$ 7:4′-Dihydroxy-4-phenylflavylium chloride, 943.
7:8-Dihydroxy-4-phenylflavylium chloride, 944.
7-Hydroxy-4-*p*-hydroxyphenylflavylium chloride, 942.
$C_{21}H_{16}OBr_2$ *p*-Bromophenyl β-*p*-bromophenyl-β-phenylethyl ketone, 991.
$C_{21}H_{16}O_6N_2$ β-1-Acenaphthylethyl 3:5-dinitrobenzoate, 669.
$C_{21}H_{17}OCl$ *p*-Chlorophenyl ββ-diphenylethyl ketone, 991.
$C_{21}H_{18}O_4N_4$ 2′-Methyldeoxybenzoin 2:4-dinitrophenylhydrazone, 1125.
$C_{21}H_{18}O_6Br_2$ Dibromo-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-3-carboxylic acid, 640.
$C_{21}H_{18}O_{12}N_4$ *dl*-1-Methyl*cyclo*hexane-1:2-diol bis-3:5-dinitrobenzoate, 1272.
$C_{21}H_{19}ON$ ω-Anilino-ω-benzylacetophenone, 1032.
4-Benzylmethylaminobenzophenone, 896.
$C_{21}H_{19}OCl$ Triphenylmethyl β-chloroethyl ether, 140.
$C_{21}H_{19}O_6N$ Ethyl 2-aldehydo-4-methoxyphenoxyacetate azlactone, 994.
$C_{21}H_{19}O_6Br$ Bromo-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-3-carboxylic acid, 640.
$C_{21}H_{19}O_8N$ 2′-Nitro-2-acetoxy-4-(β-acetoxyethoxy)chalkone, 1101.
$C_{21}H_{20}ON_2$ *N*-Benzhydryl-*N*′-*p*-methoxyphenylformamidine, 1219.
$C_{21}H_{20}O_5N_4$ 1-Keto-7-methoxyhexahydrophenanthrene 2:4-dinitrophenylhydrazone, 1291.
$C_{21}H_{20}O_{14}B_2$ Hydroxydroserone diboroacetate, 335.
$C_{21}H_{21}O_4N$ 6:7:3′:4′-Bismethylenedioxy-8:6′-methyleneprotolaudanosine methine, and its salts, 666.
$C_{21}H_{21}O_5N$ 2:3:11:12-Tetramethoxyoxyprotoberberine, 295.
$C_{21}H_{21}O_7N_5$ Piperidinomethylquinoline picrates, 1144.
$C_{21}H_{22}O_2N_2$ Strychnine, 935, 1291, 1685.
$C_{21}H_{22}O_6N_2$ 6:7:3′:4′-Bismethylenedioxy-2-carbamyl-6′-methoxymethyl-1:2:3:4-tetrahydroprotopapaverine, 666.
$C_{21}H_{22}O_6Br_2$ Dibromo-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, 642.
$C_{21}H_{22}O_7N_2$ ζ-3-Methoxyphenyl-δ-methyl-Δ^{α}-hexen-δ-ol 3:5-dinitrobenzoate, 433.
$C_{21}H_{23}O_5N$ 5:6-Dimethoxyhomophthalo-β-veratrylethylimide, 295.
$C_{21}H_{23}O_7N$ Methyl 5:6-dimethoxyhomophthalo-β-piperonylethylamate, 295.

$C_{21}H_{24}O_8S$ 2-*p*-Toluenesulphonyl 4:6-benzylidene α-methylglucoside, 1198.
$C_{21}H_{25}O_7N$ 5:6-Dimethoxyhomophthalo-β-veratrylethylamic acid, 295.
$C_{21}H_{26}O_8N_2$ Ethyl 4-(nitro-3′:4′-dimethoxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylates, 818.
$C_{21}H_{27}O_4N$ Ethyl α-cyano-α-(*trans*-2-carbethoxy*cyclo*pentyl)-γ-phenylbutyrate, 1538.
$C_{21}H_{27}O_6N$ Ethyl 4-(3′:4′-dimethoxyphenyl)-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylate, 818.
$C_{21}H_{28}O_4N_4$ Dinitro-4:4′-bisdiethylaminodiphenylmethane, 58.
Trimethylglucosazone, 1402.

21 IV

$C_{21}H_{16}O_3N_2S$ 2-Nitro-2′-cinnamamidodiphenyl sulphide, 1264.
$C_{21}H_{17}ONCl_2$ Benzylidene*iso*di-*o*-chlorophenylhydroxyethylamine, 1123.
$C_{21}H_{17}O_2NCl_2$ Salicylidene*iso*di-*o*-chlorophenylhydroxyethylamine, 1123.
$C_{21}H_{22}O_4NI$ 2:3:11:12-Tetramethoxyoxyprotoberberine iodide, 295.
$C_{21}H_{29}O_2NS$ *p*-Toluenesulphonyl-*sec*.-octylaniline, 1282.

21 V

$C_{21}H_{15}O_2N_2IS$ 2-*o*-Nitrophenyl-1-styrylthiazolinium iodide, 1264.

C_{22} Group.

$C_{22}H_{20}$ Methyltetrahydro-1:2:5:6-dibenzfluorene, 1325.
3-β-Phenylethyl-2-methyl-4:5-benzindene, 1325.
$C_{22}H_{22}$ Octahydro-1:2:3:4-dibenzanthracene, 1684.

22 II

$C_{22}H_{16}O_3$ Benzyloxyflavones, 868.
2-*p*-Methoxystyryl-1:4-α-naphthapyrone, 870.
$C_{22}H_{16}O_8$ 6:7-Methylenedioxy-1-(3′:4′:5′-trimethoxyphenyl)naphthalene-2:3-dicarboxylic anhydride, 1581.
$C_{22}H_{18}O_2$ γ-Hydroxy-αγγ-triphenyl-*n*-butyrolactone, 1370.
$C_{22}H_{18}O_3$ 7-Benzyloxyflavanone, 867.
2-Hydroxy-4-benzyloxyphenyl styryl ketone, 867.
$C_{22}H_{18}O_4$ 2-Acetyl-1-naphthyl *p*-methoxycinnamate, 870.
2-Benzoyloxy-5-benzyloxyacetophenone, 869.
2-Hydroxy-5-benzyloxydibenzoylmethane, 869.
ω-*p*-Methoxycinnamoyl-2-acetyl-1-naphthol, 870.
$C_{22}H_{18}O_7$ 6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-2:3-dicarboxylic anhydride, 640.
6:7-Methylenedioxy-1-(3′:4′:5′-trimethoxyphenyl)-2-hydroxymethylnaphthalene 3-carboxylic lactone, 1580.
$C_{22}H_{18}N_2$ β-Benzhydrylamino-α-phenylacrylonitrile, 1219.
$C_{22}H_{20}O_2$ 4-Hydroxy-2-methyldibenzyl benzoate, 1125.
Octahydro-1:2:3:4-dibenzanthraquinone, 1684.
$C_{22}H_{20}O_6$ 6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-2-hydroxymethylnaphthalene-3-carboxylic lactone, 1580.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)hydroxymethylnaphthalenecarboxylic lactones, 643.
Tetramethoxybenzo-3:4-fluorene-1-carboxylic acid, 1579.
$C_{22}H_{20}O_8$ 6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-2:3-dicarboxylic acid, 640.
β-3:4:5-Trimethoxybenzoyl-α-(3′:4′-methylenedioxybenzylidene)-β-methylenepropionic acid, 1580.
$C_{22}H_{22}O$ Octahydrodibenzanthrone, 1684.
$C_{22}H_{22}O_2$ Decahydro-1:2:3:4-dibenzanthraquinone, 1107.
$C_{22}H_{22}O_3$ *o*-Octahydrophenanthroylbenzoic acid, 1684.
$C_{22}H_{22}O_5$ 2:3-Dimethylanthronylidenedipropionic acid, 1103.
$C_{22}H_{22}O_6$ 2:11-Diketo-5:6:13:14-tetramethoxyhexahydrochrysene-*a*, 1414.
$C_{22}H_{22}O_7$ 2-Acetoxy-4-(β-acetoxyethoxy)-4′-methoxychalkone, 1100.
β-3:4-Dimethoxybenzoyl-β-(3′:4′-dimethoxybenzylidene)-β-methylenepropionic acid, 1579.
$C_{22}H_{24}O_2$ Dodecahydro-1:2:3:4-dibenzanthraquinone, 1107.
ω-Octahydrophenanthryl-*o*-toluic acid, 1684.
$C_{22}H_{24}O_4$ Ethyl 6:7-dimethoxy-2-phenyl-3:4-dihydronaphthyl-1-acetate, 1416.
$C_{22}H_{24}O_6$ 6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-3-hydroxymethyl-1:2:3:4-tetrahydronaphthalene-2-carboxylic lactones, 642.
$C_{22}H_{24}O_7$ 3-Benzoyl 4:6-benzylidene 2-methyl α-methylaltroside, 1197.
$C_{22}H_{26}O_4$ Decahydro-5:6:7:8-dibenznaphthaquinyl diacetate, 1106.
αδ-Diphenetoylbutane, 1093.
Ethyl 2-(β-6′-methoxy-1′-naphthylethyl)methyl*cyclo*pentanone-2-carboxylates, 252.
5:6:13:14-Tetramethoxyhexahydrochrysene-*a*, 1414.
$C_{22}H_{28}O_6$ Matairesinol dimethyl ether, 635.
Methyl βγ-dianisyl adipate-*b*, 1412.
Methyl βγ-di-3-methoxyphenyladipate-*a*, 1413.
$C_{22}H_{26}O_8$ 4-Hydroxy-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)-3-hydroxymethyl-1:2:3:4-tetrahydronaphthalene-2-carboxylic acid, 642.
$C_{22}H_{29}N_3$ δ-Diethylamino-α-methylbutylamino-9-phenanthridine, and its salts, 1409.
$C_{22}H_{30}O_2$ αζ-Di-*p*-phenetylhexane, 1093.
$C_{22}H_{34}O_4$ Ethyl α- and β-santalylmalonates, 313.
$C_{22}H_{48}Pb$ Di-*n*-amyldi-*n*-hexyl-lead, 42.

22 III

$C_{22}H_{15}O_3Cl$ 7-Hydroxy-6′-methoxy-4-phenyl-2:3-coumareno(3′:2′)-chromylium chloride, 943.
$C_{22}H_{16}O_3N_2$ 3-Benzoyloximino-2-phenylmethylindolenines, 1211.
$C_{22}H_{18}O_8N_4$ Peltogynol 2:4-dinitrophenylhydrazone, 750.
$C_{22}H_{19}O_7Cl$ 6:7-Methylenedioxy-1-(3′:4′:5′-trimethoxyphenyl)-2-chloromethylnaphthalene-3-carboxylic acid, 1580.
$C_{22}H_{19}O_7Br$ 4-Hydroxy-6:7-dimethoxy-1-(6′-bromo-3′:4′-dimethoxyphenyl)-3-hydroxymethylnaphthalene-2-carboxylic lactone, 642.
$C_{22}H_{20}O_3Cl_2$ 4′:5′-Dichloro-octahydrophenanthroylbenzoic acid, 1684.
$C_{22}H_{20}O_6S_2$ α-*p*-Carboxyphenylsulphonyl-α-*p*-tolylsulphonyl-α-phenylthioethane, 20.
$C_{22}H_{21}ON$ 4-Benzylethylaminobenzophenone, 896.
$C_{22}H_{21}O_6Cl$ β-3:4-Dimethoxybenzoyl-α-(3′:4′-dimethoxybenzylidene)-β-chloromethylpropionolactone, 1579.
6:7-Dimethoxy-1-(3′:4′-dimethoxyphenyl)-2-chloromethylnaphthalene-3-carboxylic acid, 1579.
$C_{22}H_{23}ON_3$ 4-Benzylethylaminobenzophenone oxime, 896.
$C_{22}H_{22}O_{14}N_4$ Tetranitromataniresinol dimethyl ether, 635.
$C_{22}H_{24}O_6Br_2$ Dibromomataniresinol dimethyl ether, 635.
$C_{22}H_{24}O_8N_4$ Ethyl β-*o*-toluoylethane-αα-dicarboxylate 2:4-dinitrophenylhydrazone, 1000.
$C_{22}H_{24}O_{10}N_2$ Dinitromataniresinol dimethyl ether, 635.
$C_{22}H_{24}N_2Br_2$ Di(quinolyl-8-methyl)ethylamine hydrobromide, 1144.
$C_{22}H_{26}O_5S$ 3-*p*-Toluenesulphonyl 4:6-benzylidene 2-methyl α-methylaltroside, 1197.
$C_{22}H_{27}O_7N$ Methyl 5:6-dimethoxyhomophthalo-β-veratrylethylamate, 295.
$C_{22}H_{28}N_2Br$ 3-Bromo-9-δ-diethylamino-α-methylbutylaminophenanthridine, and its salts, 1409.
$C_{22}H_{29}ON_3$ α-Aldehydo-δ-(2:2:6-trimethyl-Δ^6-*cyclo*hexenyl)-β-methyl-$\Delta^{\alpha\gamma}$-butadiene phenylsemicarbazone, 586.
$C_{22}H_{37}OCl$ *p*-Chlorophenyl cetyl ether, 1834.
$C_{22}H_{37}OBr$ *p*-Bromophenyl cetyl ether, 1834.

22 IV

$C_{22}H_{18}O_3N_2S$ 2-Cinnamo-*o*-nitrophenylamidophenyl methyl sulphide, 1264.
$C_{22}H_{17}O_4N_4Br$ 1-Hydroxy-3-(2′-bromo-4′-nitrophenyl)-3:4-dihydrophthalazine-4-acetanilide, 1136.

C_{23} Group.

$C_{23}H_{18}O_3$ αβ-*endo*-9:10-Dihydroanthraquinyl-9:10-β-phenylpropionic acid, 1103.
β-Phenyl-β-anthranylpropionic acid, 1103.
$C_{23}H_{18}O_4$ 7-Benzyloxy-4′-methoxyflavone, 868.
$C_{23}H_{20}O_3$ 2:3-Diphenylbenzo-2-pyranol ethyl ether, 1165.
$C_{23}H_{20}O_4$ 7-Benzyloxy-4′-methoxyflavanone, 867.
2-Hydroxy-4-benzyloxyphenyl 4-methoxystyryl ketone, 867.
$C_{23}H_{20}O_4$ 7-Methoxy-4′-benzyloxyflavanone, 867.
$C_{23}H_{29}O_{10}$ Tetra-acetylcyanomaclurin, 754.
$C_{23}H_{22}O_6$ Methyl tetramethoxybenzo-3:4-fluorene-1-carboxylate, 1579.
$C_{23}H_{24}O_3$ Ethyl hexahydrocholanthrenecarboxylate, 670.
$C_{23}H_{24}O_7$ β-3:4-Dimethoxybenzoyl-α-(3′:4′-dimethoxybenzylidene)-β-methoxymethylpropionolactone, 1579.
Ethyl 4-hydroxy-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-2-carboxylate, 642.
$C_{23}H_{25}N$ Cevanthridine, and its salts, 124.
$C_{23}H_{26}O_3$ Ethyl 2-(β-1′-acenaphthylethyl)*cyclo*hexanone-2-carboxylate, 669.
$C_{23}H_{26}O_7$ Ethyl 4-keto-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylate, 641.
$C_{23}H_{26}O_8$ 2:4-Dibenzoyl 3:6-dimethyl β-methylglucoside, 176.
$C_{23}H_{26}O_{10}$ 4-Hydroxy-6:7-dimethoxy-2-carboxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-3-glycollic lactone, 643.
$C_{23}H_{28}O_4$ Anhydrodigoxigenone, 1307.
$C_{23}H_{30}O_3$ α- and β-Anhydrodigitoxigenones, 1050.
$C_{23}H_{30}O_5$ αδ-Bis-(3-methoxy-4-ethoxyphenyl)-α-methylbutan-β-one, 121.
n- and *iso*-Digoxigenones, 1307.
$C_{23}H_{30}O_6$ *iso*Digoxigonic acid, 1308.
$C_{23}H_{32}O_3$ α- and β-Anhydrodigitoxigenins, 1050.
$C_{23}H_{32}O_5$ Dihydrodigoxigenone, 1307.
$C_{23}H_{34}O_5$ Digoxigenin, constitution of, 1305.
$C_{23}H_{34}O_6$ *iso*Digoxigenic acid, 1308.

23 III

$C_{23}H_{15}O_5Cl$ 7-Hydroxy-4-(4″-hydroxy-3″-carboxyphenyl-2:3-indeno(3′:2′)-chromylium chloride, 945.
$C_{23}H_{16}OCl_2$ 1:5-Dichloro-10-cinnamylanthrone, 1104.
$C_{23}H_{16}O_5N_2$ 5-Keto-2-phenyl-4-(2′-nitro-5′-benzyloxybenzylidene)-4:5-dihydro-oxazole, 1266.
$C_{23}H_{17}O_3N$ *m*-Methoxybenzylidenephenyl*iso*oxazolone, 1541.
$C_{23}H_{18}O_6N_2$ 2-Nitro-α-benzamido-5-benzyloxycinnamic acid, 1266.
$C_{23}H_{19}O_6N$ 2-Nitro-5-methoxy-α-(*m*-benzyloxyphenyl)cinnamic acid, 1541.
$C_{23}H_{21}ON$ 1:2:3:4-Tetrahydro-6-naphthodiphenylamide, 80.
$C_{23}H_{21}O_4N$ 2-Amino-5-methoxy-α-(*m*-benzyloxyphenyl)cinnamic acid, 1541.
$C_{23}H_{22}O_5N_4$ 4-Methoxydimethyldeoxybenzoin 2:4-dinitrophenylhydrazones, 1125.

$C_{23}H_{23}O_3N$ Benzylidene*iso*di-*o*-methoxyphenylhydroxyethylamine, 1121.
a-Salicylideneaminodi-(*o*-methoxybenzyl), 1123.
$C_{23}H_{23}O_4N$ Salicylidene*iso*di-*o*-methoxyphenylhydroxyethylamine, 1121.
$C_{23}H_{23}O_4Cl$ Methyl 6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)-2-chloromethylnaphthalene-3-carboxylate, 1579.
$C_{23}H_{23}O_7Br$ Ethyl 4-hydroxy-6:7-dimethoxy-1-(6′-bromo-3′:4′-dimethoxyphenyl)naphthalene-2-carboxylate, 642.
$C_{23}H_{24}O_7Br_2$ Ethyl 3-bromo-4-keto-6:7-dimethoxy-1-(6′-bromo-3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylate, 642.
$C_{23}H_{26}O_4N_2$ Brucine, 935, 1291, 1685.
$C_{23}H_{31}O_9N_3$ Dinitro-*a*δ-bis-(3-methoxy-4-ethoxyphenyl)-*a*-methylbutan-β-one, 122.
$C_{23}H_{30}O_3N_2$ Dihydrobrucidine, salts of, 1293.
$C_{23}H_{30}O_4N_2$ Anhydrodigoxigenone dioxime, 1307.
$C_{23}H_{31}ON_3$ 2-Methoxy-9-δ-diethylamino-*a*-methylbutylaminophenanthridine, and its salts, 1410.
$C_{23}H_{31}O_5N$ *n*- and *iso*-Digoxigenone oximes, 1307.
$C_{23}H_{31}O_9N_3$ *N*-Nitrosomethoxymethyl*chano*dihydrostrychnanic acid, 939.
$C_{23}H_{33}O_5N_3$ Methoxymethyl*chano*dihydrostrychnanic acid, 939.
$C_{23}H_{33}O_5N$ Dihydrodigoxigenone oxime, 1307.

23 IV

$C_{23}H_{17}OF_4B$ 2:4:6-Triphenylpyrylium borofluoride, 1390.
$C_{23}H_{17}O_2Cl_4Fe$ 4-Phenacylflavylium ferrichloride, 87.
$C_{23}H_{26}O_6N_2Br_6$ Pentabromomethoxymethyl*chano*dihydrostrychnonic acid hydrobromide, 938.

C_{24} Group.

$C_{24}H_{20}N_2$ *N*-Benzhydryl-*N*′-β-naphthylformamidine, 1219.
$C_{24}H_{22}O_9$ Methyl 6:7-methylenedioxy-1-(3′:4′:5′-trimethoxyphenyl)naphthalene-2:3-dicarboxylate, 1581.
$C_{24}H_{32}O_{10}$ *O*-Tetra-acetylpeltogynol, 748.
$C_{24}H_{24}O_2$ Octahydrodibenzanthranyl acetate, 1684.
$C_{24}H_{24}O_3$ Ethyl 2-(3′-phenanthrylmethyl)*cyclo*hexanone-2-carboxylate, 1323.
$C_{24}H_{24}O_6$ Dimethyl 6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-2:3-dicarboxylate, 640.
$C_{24}H_{24}N_4$ 1:4-Bis-(8′-quinolylmethyl)piperazine, 1426.
$C_{24}H_{26}O_3$ Ethyl β-cinnamyloxy-*a*-cinnamylcrotonate, 1364.
Ethyl dicinnamylacetoacetate, 1364.
p-Phenylphenacyl-γ-Δ^1-*cyclo*hexenylbutyrate, 1638.
$C_{24}H_{28}O_6$ Ethyl 3-aldehydo-4-keto-6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)-1:2:3:4-tetrahydronaphthalene-2-carboxylate, 642.
$C_{24}H_{26}N_4$ *s*-Bis-(8-quinolylmethyl)dimethylethylenediamine, dihydrobromide of, 1426.
$C_{24}H_{30}O_4$ Butyl diphenylsuccinates, 158.
$C_{24}H_{30}O_6$ Matairesinol diethyl ether, 635.
$C_{24}H_{30}O_8$ Methyl βγ-di-3:4-dimethoxyphenyladipate-*a*, 1414.
$C_{24}H_{32}O_4$ Guaiaretic acid diethyl ethers, 122.
$C_{24}H_{32}O_6$ Methyl *iso*digoxigonate, 1308.
$C_{24}H_{34}O_4$ Dihydroguaiaretic acid diethyl ether, 122.
$C_{24}H_{34}O_6$ Methyl *iso*digoxigenonate, 1308.
$C_{24}H_{36}O_6$ Methyl *iso*digoxigenate, 1308.
$C_{24}H_{38}O_6$ Methyl *iso*digoxigeninate, 1308.
$C_{24}H_{52}Sn$ Tetra-*n*-hexyltin, 41.

24 III

$C_{24}H_{14}O_5S$ 1′-Anthraquinonyl-2-hydroxy-1-naphthylsulphone, 1236.
1-Anthraquinonyl-1-sulphino-2-naphthyl ether, 1236.
$C_{24}H_{22}O_3N_2$ Benzhydrylaminomethyleneacetoacetanilide, 1220.
$C_{24}H_{24}N_4Si$ Tetra-*m*-aminotetraphenylsilicane, 1085.
$C_{24}H_{32}O_4N_2$ Ethyl diphenylene-4:4′-bis-β-aminocrotonate, 1570.
$C_{24}H_{31}O_6N$ β-Keto-aδ-bis-(3-methoxy-4-ethoxyphenyl)-γ-methylvaleramide, 121.
$C_{24}H_{32}O_3N_2$ *N*(b)-Methyl-*des*-dihydrobrucidines, 1688, 1693.
$C_{24}H_{32}O_4Br_2$ Dibromodihydroguaiaretic acid diethyl ether.
$C_{24}H_{32}O_8N_2$ Dinitrodihydroguaiaretic acid diethyl ether, 122.
$C_{24}H_{33}O_3N_3$ Methyl γ-keto-ε-teresantalylhexoate phenylsemicarbazone, 314.
$C_{24}H_{33}O_5N_3$ Digoxigenone semicarbazones, 1307.
$C_{24}H_{34}O_4N_2$ Hydroxymethyltetrahydrobrucidine, 1691.
$C_{24}H_{35}O_5N_3$ Dihydrodigoxigenone semicarbazone, 1307.

24 IV

$C_{24}H_{13}O_3BrS$ 1-Anthraquinonyl 6-bromo-2-hydroxy-1-naphthyl sulphide, 1236.
$C_{24}H_{13}O_5BrS$ 1-Anthraquinonyl 1-sulphino-6-bromo-2-naphthyl ether, 1236.
$C_{24}H_{19}O_3Cl_4Fe$ 7-Methoxy-4-phenacylflavylium ferrichloride, 87.
$C_{24}H_{20}Cl_2S_2Pd$ Bis(diphenylsulphide)palladium dichloride, 1559.
$C_{24}H_{31}O_6NS$ 6:7:3′:4′-Bismethylenedioxy-2-benzenesulphonyl-1:2:3:4-tetrahydroprotopapaverine, 667.
$C_{24}H_{29}O_5Cl_4Fe$ 2-Hydroxy-4-methoxy-3-*iso*amylbenzaldehyde ferrichloride, 1372.
$C_{24}H_{33}O_3N_2Cl$ *N*(b)-Methyldihydrobrucidinium chlorides, 1691.
$C_{24}H_{33}O_3N_2I$ *N*(b)-Methyldihydrobrucidinium iodides, 1690.

$C_{24}H_{54}Cl_2P_2Pd$ Bis(tri-*n*-butylphosphine)palladium dichloride, 1560.
$C_{24}H_{54}Cl_2As_2Pd$ Bis(tri-*n*-butylarsine)palladium dichloride, 1561.
$C_{24}H_{54}Br_2P_2Pd$ Bis(tri-*n*-butylphosphine)palladium dibromide, 1560.
$C_{24}H_{54}I_2P_2Pd$ Bis(tri-*n*-butyl phosphine)palladium di-iodide, 1560.

24 V

$C_{24}H_{16}O_4N_4Cl_2S_2$ Bis-2-*p*-chloro-*o*-nitroanilinophenyl disulphide, 186.
$C_{24}H_{20}O_4N_4Cl_2Ni$ Nickel *p*-chlorophenyl-*n*-butylglyoxime, 623.

C_{25} Group.

$C_{25}H_{20}O_4$ 4′-Methoxy-4-(*p*-methoxyphenacylidene)flavene, 89.
$C_{25}H_{22}O_4$ 4′-Methoxy-4-(*p*-methoxyphenacyl)flavene, 89.
$C_{25}H_{24}O_5$ *o*-Hydroxybenzylidenedi-(*p*-methoxyacetophenone), 89.
$C_{25}H_{34}O_4$ α- and β-Anhydrodigitoxigenin acetates, 1050.
$C_{25}H_{38}O_{16}$ Trimethylsucrose penta-acetate, 651.

25 III

$C_{25}H_{16}O_4N_4$ *p*-Phenylbenzophenone 2:4-dinitrophenylhydrazone, 1785.
$C_{25}H_{20}O_3N_2$ 1-Methoxynaphthalene-2:4-dicarboxylanilide, 1063.
$C_{25}H_{22}O_{10}Cl_4$ 4:6-Bisdichloroacetyl 2:3-dibenzoyl α-methylglucoside, 1181.
$C_{25}H_{24}O_3N_2$ Ethyl benzhydrylaminomethylenemalonanilide, 1219.
$C_{25}H_{28}O_6N_2$ 1-(β-5′-Tetralylethyl)*cyclo*hexanol 3:5-dinitrobenzoate, 1636.
$C_{25}H_{30}O_7N_2$ Retrorsine phenylcarbamate, 13.
$C_{25}H_{34}O_2N_2$ α-Methyl-δ-*iso*propylpimelditoluidide, 316.
$C_{25}H_{34}O_3N_2$ Dimethyl-*des*-brucidine, 1690.
$C_{25}H_{35}O_2N_3$ β-Keto-δ-hydroxy-θ-(2:2:6-trimethyl-Δ^6-*cyclo*hexenyl)-ζ-methyl-$\Delta^{\alpha\eta}$-octadiene phenylsemicarbazone, 587.

25 IV

$C_{25}H_{19}O_3Cl_4Fe$ 2:6-Diphenyl-4-(*o*-acetoxyphenyl)pyrylium ferrichloride, 88.
$C_{25}H_{21}O_3Cl_4Fe$ 2:6-Diphenyl-4-(2′:4′-dimethoxyphenyl)pyrylium ferrichloride, 87.
$C_{25}H_{21}O_4Cl_4Fe$ 4′-Methoxy-4-(*p*-methoxyphenacyl)flavylium ferrichloride, 89.
$C_{25}H_{34}O_3N_2I$ *neo*Brucidine dimethiodide, 1292.

C_{26} Group.

$C_{26}H_{26}$ αδ-Di-(4-methyl-1-naphthyl)butane, 444.

26 II

$C_{26}H_{14}F_2$ 2:2′-Difluorobisdiphenylene-ethylene, 989.
$C_{26}H_{21}N$ Benzylidene-*p*-phenylbenzhydrylamines, 1784.
p-Phenylbenzhydrylidene-benzylamine, 1784.
$C_{26}H_{22}O_2$ 2-Diphenylmethylol-6-phenyl-1:2:3:6-tetrahydrobenzolactone, 1370.
$C_{26}H_{28}O_4$ Decahydro-1:2:3:4-dibenzanthraquinyl diacetate, 1107.
$C_{26}H_{28}O_6$ 5:8-Diacetoxydodecahydro-1:2:3:4-dibenzanthraquinone, 1107.
$C_{26}H_{26}O_6$ Diethyl 6:7-dimethoxy-1-(3′:4′-dimethoxyphenyl)naphthalene-2:3-dicarboxylate, 640.
$C_{26}H_{30}N_4$ Bis-(8-quinolylmethyl)-β-diethylaminoethylamine, 1426.
$C_{26}H_{32}O_2$ Octahydrotetra*cyclo*pentenoanthraquinone, 1106.

26 III

$C_{26}H_{12}O_8N_4$ 2:2′:7:7′-Tetranitrobisdiphenylene-ethylene, 1611.
$C_{26}H_{14}O_6N_2$ Dimethoxyperylene-3:4:9:10-tetracarboxylic acid di-imides, 499.
$C_{26}H_{16}O_3S$ 1-Anthraquinonyl 2-acetoxy-1-naphthyl sulphide, 1236.
$C_{26}H_{16}O_4S$ 1′-Anthraquinonyl-2-acetoxy-1-naphthylsulphone, 1236.
$C_{26}H_{17}O_2N$ 2:9-Dibenzoylcarbazole, 744.
$C_{26}H_{20}ON_2$ Benzophenoneoxime α-phenyliminobenzyl ethers, 1228.
$C_{26}H_{22}O_7N_2$ *p*-Nitrobenzoyl-6:7:3′:4′-bismethylenedioxy-8:6′-methylene-1:2:3:4-tetrahydroprotopapaverine, 666.
$C_{26}H_{24}O_6N_4$ Apocinchene methyl ether picrate, 303.
$C_{26}H_{25}O_4N$ Tribenzoylvalinol, 414.
$C_{26}H_{26}O_6N_2$ 2-Methyl-1-(β-1′-naphthylethyl)*cyclo*hexyl 3:5-dinitrobenzoate, 671.
$C_{26}H_{32}O_4N_2$ Ethyl 3:3′-dimethyldiphenylene-4:4′-bis-β-aminocrotonate, 1569.
$C_{26}H_{32}O_6N_2$ Ethyl 3:3′-dimethoxydiphenylene-4:4′-bis-β-aminocrotonate, 1569.
$C_{26}H_{36}O_5N_2$ Acetoxymethyltetrahydrobrucidine, 1691.

26 IV

$C_{26}H_{15}O_4BrS$ 1-Anthraquinonyl 6-bromo-2-acetoxy-1-naphthyl sulphide, 1236.
$C_{26}H_{15}O_5BrS$ 1′-Anthraquinonyl-6-bromo-2-acetoxy-1-naphthylsulphone, 1236.
$C_{26}H_{21}O_3Cl_4Fe$ 2:6-Diphenyl-4-(2′-acetoxy-4′- and -5′-methoxyphenyl) pyrylium ferrichlorides, 88.
$C_{26}H_{22}O_2N_4Cu$ Cupric 3-benzeneazo-*p*-tolyloxide, 1599.
$C_{26}H_{22}O_2N_4Ni$ Nickel 3-benzeneazo-*p*-tolyloxide, 1599.
$C_{26}H_{23}O_4F_4B$ 2:4:6-Tri-*p*-methoxyphenylpyrylium borofluoride, 1390.

$C_{26}H_{38}O_2N_2Cl_2$ *N*-(b)-Methyl-*des*-dihydrobrucidine dimethochlorides, 1689, 1693.
$C_{26}H_{38}O_2N_2I_2$ *N*(b)-Methyl-*des*-dihydrobrucidine-*a* dimethiodides, 1689.
$C_{26}H_{39}O_4N_2I$ Methoxymethyltetrahydrobrucidine methosulphate, 1692.

C_{27} Group.

$C_{27}H_{40}$ *neo*Ergostatetraene, 467.

27 II

$C_{27}H_{18}Br_2$ $a\gamma$-Di-(*p*-bromophenyl)-$a\gamma$-diphenylallene, 992.
$C_{27}H_{19}Cl$ a-*p*-Chlorophenyl-$a\gamma\gamma$-triphenylallene, 991.
$C_{27}H_{20}O_3$ 2-Phenylacetyl-1-naphthyl cinnamate, 870.
$C_{27}H_{21}Cl$ a-*p*-Chlorophenyl-$a\gamma\gamma$-triphenyl-Δ^a-propylene, 991.
$C_{27}H_{22}O$ 2:2:4-Triphenylchroman, 1120.
$C_{27}H_{24}O_2$ $aa\gamma$-Triphenyl-γ-(*o*-hydroxyphenyl)-*n*-propyl alcohol, 1119.
$C_{27}H_{30}N_4$ 1-β-Bis-(8′-quinolyl methyl)aminoethylpiperidine, 1426.
$C_{27}H_{32}O_2$ Substance, from clovenic anhydride and magnesium phenyl bromide, 1298.
$C_{27}H_{33}N_3$ Tris-β-phenylethyltrimethylenetriamine, 865.
$C_{27}H_{42}O_3$ *neo*Ergostatriol, 467.
$C_{27}H_{46}O$ Cholesterol, action of selenium on, 1391.

27 III

$C_{27}H_{16}O_4N_2$ 3-1-Anthraquinonylaminonaphthalomethylimide, 498.
$C_{27}H_{22}OBr_2$ $a\gamma$-Di-(*p*-bromophenyl)-$a\gamma$-diphenylpropyl alcohol, 992.
$C_{27}H_{23}OCl$ a-*p*-Chlorophenyl-$a\gamma\gamma$-triphenylpropyl alcohol, 991.
$C_{27}H_{26}O_6N_4$ Apocinchene ethyl ether picrate, 303.
$C_{27}H_{43}O_2N$ Cevine, 124.
$C_{27}H_{56}N_4Au_4$ Di-*n*-propylcyanogold, 1029.

C_{28} Group.

$C_{28}H_{42}$ Lumistatetraene, 1223.

28 II

$C_{28}H_{28}O_6$ 2-Acetyl 6-trityl 3:4-anhydro-a-methylgalactoside, 688.
$C_{28}H_{36}O_2$ Hexadecahydro-5:6:7:8-di*cyclo*penteno-1:2:3:4-dibenzanthraquinone, 1106.
$C_{28}H_{50}O_5$ Lettoresinols, 1130.
$C_{28}H_{46}O_3$ Lumistadienetriol, 1222.
$C_{28}H_{60}Sn$ Tetra-*n*-heptyltin, 41.

28 III

$C_{28}H_{28}O_9S$ Benzoyl-*p*-toluenesulphonyl 4:6-benzylidene a-methylglucosides, 1197.
$C_{28}H_{32}O_{12}S_2$ 2:3:4-Tri-*p*-toluenesulphonyl β-methylglucoside, 1181.

28 IV

$C_{28}H_{20}O_{10}N_2S_2$ Di-(*p*′-carboxy-*o*′-nitrophenoxy-*m*-tolyl) disulphide, 1238.
$C_{28}H_{24}O_4N_2Ni$ Nickel dibenzoinoxime, 821.
$C_{28}H_{24}O_4N_2Pd$ Palladium dibenzoinoxime, 821.
$C_{28}H_{24}O_4N_2Pt$ Platinum dibenzoinoxime, 822.
$C_{28}H_{28}O_2N_4Cu$ Cupric 3-tolueneazo-*p*-tolyloxides, 1599.
$C_{28}H_{26}O_2N_4Ni$ Nickel 3-tolueneazo-*p*-tolyloxides, 1599.
$C_{28}H_{28}Cl_2S_2Pd$ Bis(dibenzylsulphide)palladium dichloride, 1559.

28 V

$C_{28}H_{30}O_4N_4Cl_2S_2$ Bis-2-aceto-*p*-chloro-*o*-nitrophenylamidophenyl disulphide, 1264.
$C_{28}H_{36}O_4N_2Cl_4Cu$ Copper benzoinoxime dichloride, 821.

C_{29} Group.

$C_{29}H_{20}O_2$ 4-(a-Phenylphenacylidene)flavene, 1117.
$C_{29}H_{22}O_2$ 4-(a-Phenylphenacyl)flavene, 1117.
$C_{29}H_{24}O_2$ 4-(β-Hydroxy-$\beta\beta$-diphenylethyl)flavene, 1120.
$C_{29}H_{24}O_3$ $a\gamma$-Dibenzoyl-β-*o*-hydroxyphenyl-a-phenylpropane, 1117.
$C_{29}H_{24}O_4$ 2-Hydroxy-4-benzyloxyphenyl 4-benzyloxystyryl ketone, 867.
$C_{29}H_{48}O$ Fucostenones, 1207.
$C_{29}H_{50}O$ Dihydrofucosterols, 1206.

29 III

$C_{29}H_{21}O_{11}N_3$ 6-Hydroxy-5:7-dimethoxy-4-phenylflavylium picrate, 946.
$C_{29}H_{27}O_{10}N$ Bis-(6-carboxymethylhomopiperonyl)-β-piperonylethylamine, 665.

29 IV

$C_{29}H_{21}O_2Cl_4Fe$ 4-(a-Phenylphenacyl)flavylium ferrichloride, 1117.

29 V

$C_{29}H_{19}O_4N_4IS_2$ 2:2′-Di-*o*-nitrophenylthiocarbocyanine iodide, 1264.

C_{30} Group.

$C_{30}H_{22}O_2$ γ-Hydroxy-α-phenyl-γγ-α-naphthyl-*n*-butyrolactone, 1370.
$C_{30}H_{40}O_2$ Eicositetrahydrotetrabenzanthraquinone, 1106.
$C_{30}H_{44}O_2$ Dehydrolumisteryl acetate, 1223.

30 III

$C_{30}H_{36}O_{10}Cl_2$ 6-Dichloroacetyl 2:3:4-tribenzoyl α-methylglucoside, 1181.

30 IV

$C_{30}H_{28}O_{11}SCl_2$ 6-Dichloroacetyl 2:3-dibenzoyl 4-*p*-toluenesulphonyl α-methylglucoside, 1182.
$C_{30}H_{32}O_{13}S_2Cl_2$ 6-Dichloroacetyl 2:3:4-*p*-toluenesulphonyl β-methylglucoside, 1181.
$C_{30}H_{66}Cl_2P_2Pd$ Bis(tri-*n*-amylphosphine)palladium dichloride, 1560.
$C_{30}H_{66}Cl_2As_2Pd$ Bis(tri-*n*-amylarsine)palladium dichloride, 1561.

C_{31} Group.

$C_{31}H_{52}O_3$ Dihydrofucosteryl acetates, 1206.

31 IV

$C_{31}H_{38}O_2N_2Cl_2$ Methylbenzyl*neo*brucidinium dichloride, 1293.
$C_{31}H_{38}O_2N_2I_2$ Methylbenzyl*neo*brucidinium di-iodide, 1293.

C_{32} Group.

$C_{32}H_{32}O_4$ 5:12-Dihydroxychromanorufan, 1404.
$C_{32}H_{30}O_2$ *endo*-9:10-*o*-Phenylenetetradecahydro-1:2:3:4-dibenznaphthacene quinone, 1107.
$C_{32}H_{32}O_6$ Di-*o*-methoxyhydrobenzoin anhydride, 1122.
$C_{32}H_{36}Sn$ Tetra-β-phenylethyltin, 41.
$C_{32}H_{50}O_5$ Lumistadienetriol diacetate, 1222.
$C_{32}H_{68}Sn$ Tetra-*n*-octyltin, 41.

32 III

$C_{32}H_{22}O_6S_2$ Di(β-1-anthraquinonyloxyethyl) disulphide, 1237.

32 IV

$C_{32}H_{22}O_2N_4Cu$ Cupric benzeneazonaphthoxides, 1599.
$C_{32}H_{22}O_2N_4Ni$ Nickel benzeneazonaphthoxides, 1600.
$C_{32}H_{32}O_4N_4Si$ Tetra-*m*-acetamidotetraphenylsilicane, 1086.
$C_{32}H_{32}O_6N_2Ni$ Nickel dibenzoinoxime diacetate, 821.

C_{33} Group.

$C_{33}H_{25}N$ 2-Phenyl-3-triphenylmethylindole, 1210.
$C_{33}H_{49}N$ Cholestanonetetrahydrocarbazole, 1392.

C_{34} Group.

$C_{34}H_{54}O_3$ Lettoresinol diacetates, 1130.

C_{35} Group.

$C_{35}H_{50}O_4$ Lumistadienetriol benzoate, 1222.

35 III

$C_{35}H_{38}O_9S$ 4-*p*-Toluenesulphonyl 6-trityl 2:3-dimethyl α-methylglucoside, 687.
$C_{35}H_{46}O_6N_2$ Lumisteryl 3:5-dinitrobenzoate, 1222.
$C_{35}H_{52}O_4N_4$ Fucostenone 2:4-dinitrophenylhydrazones, 1207.

C_{36} Group.

$C_{36}H_{16}O_6$ Dibenzanthronedicarboxylic acid, 572.
$C_{36}H_{32}O_5$ 2-Hydroxy-4-benzyloxyphenyl 3:4-dibenzyloxystyryl ketone, 867.
$C_{36}H_{32}O_6$ *O*-Methylbebeerilene, 1389.

36 III

$C_{36}H_{48}N_4Si$ Tetra*iso*propyltetra-*m*-aminotetraphenylsilicane, 1086.
$C_{36}H_{51}O_{11}N$ Veratridine, constitution of, 122.

36 IV

$C_{36}H_{36}O_2N_2Cu$ Cupric 2:4-bisbenzeneazophenoxide, 1599.
$C_{36}H_{36}O_2N_2Ni$ Nickel 2:4-bisbenzeneazophenoxide, 1600.
$C_{36}H_{29}O_2NCl_{10}$ 7-Hydroxy-4-*p*-dimethylaminophenyl-2:3-indeno-(3′:2′)-chromylium chloride hydrochloride, 944.

C_{38} Group.

$C_{38}H_{44}O_4N_2Cl_2$ Tubocurarine chloride, 1386.

C_{39} Group.

$C_{39}H_{33}O_5N_6Co$ Cobaltic 3-benzeneazo-*p*-tolyloxide, 1600.

C_{40} Group.

$C_{40}H_{48}O_6N_2I_2$ *O*-Methyltubocurarine iodide, 1386.

C_{42} Group.

$C_{42}H_{39}O_5N_6Co$ Cobaltic 3-toleneazo-*p*-tolyloxides, 1600.
$C_{43}H_{52}O_6N_2I_2$ *O*-Methylbebeerinemethine methiodides, 1388.
O-Methyltubocurarinemethine methiodides, 1387.

C_{43} Group.

$C_{43}H_{25}O_{10}$ Tetrabenzoylcyanomaclurin, 754.

C_{44} Group.

$C_{44}H_{30}O_{10}$ *O*-Tetrabenzoylpeltogynol, 749.

C_{47} Group.

$C_{47}H_{42}O_{10}S$ 4-*p*-Toluenesulphonyl-2:3-dibenzoyl 6-trityl α-methylglucoside, 688.

C_{48} Group.

$C_{48}H_{38}O_{14}$ *O*-Tetra-anisoylpeltogynol, 749.

48 III

$C_{48}H_{26}O_6S_2$ 2-α-Anthraquinonyloxy-1-naphthyl disulphide, 1236.
$C_{48}H_{40}O_2N_2$ 5:12-Bis-*p*-dimethylaminophenylchromanorufan, 1404.

48 IV

$C_{48}H_{24}O_6Br_2S_2$ 2-α-Anthraquinonyloxy-6-bromo-1-naphthyl disulphide, 1236.
$C_{48}H_{22}O_2N_6Co$ Cobaltic benzeneazonaphthoxides, 1600.

C_{49} Group.

$C_{49}H_{66}O_{69}N_4$ N(b)-Methyldihydrobrucidinium carbonate, 1687.

C_{52} Group.

$C_{52}H_{104}O_2$ Wax from *Cryptococcus fagi*, 392.

52 III

$C_{52}H_{72}O_{12}N_4$ *N*(a)*N*(b)-Dimethyldihydrobrucidinium dicarbonate, 1687.

C_{54} Group.

$C_{54}H_{33}O_3N_{12}Co$ Cobaltic 2:4-bisbenzeneazophenoxide, 1600.

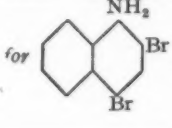
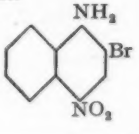
ERRATA.

In J., 1930, 2358; 1931, 3107; 1933, 671, and in the indexes, the name " Walter S. Illingworth " should be " William S. Illingworth."

VOL., 1934.

Page.	Line.	
1090	Fig. 2	The vertical broken line should descend to the vapour pressure 7·5 mm., not to 6·5 mm. as shown.
1427	26	for " **β-3 : 4-*dimethoxyphenyl-α-methylcrotonate*** " read " **β-3 : 4-*dimethoxyphenyl-α-methylacrylate*.** "
1858	4*	*for* " necessary " *read* " accessory."
2021	1	*for* " **Abbott** " *read* " **Abbot.** "
2028	28	" " " "

VOL., 1935.

55	(legend II of Fig. 3)	for " *nitroamine* " read " *nitrosoamine*."
120	5*	for " *β-3-Methoxy-4-ethoxyphenyl-α-methylcrotonic acid* " read " *β-3-Methoxy-4-ethoxyphenyl-α-methylacrylic acid*."
121	25	" " " " " " "
153	16	*delete* " containing the hydroxyl group attached to the asymmetric carbon atom."
240	8	*for* " the bromide " *read* " triethylsulphonium bromide."
332	20*	*for* " 2 : 3-Dihydroxy-1 : 4-naphthaquinone (*iso*naphthazarin) " *read* " 5 : 8-Dihydroxy-1 : 4-naphthaquinone (naphthazarin)."
724	3	*for* " purified " *read* " dissolved."
815	28	*for* " C, 59·9 " *read* " C, 65·9."
1213	9	*for* " the bromide " *read* " potassium bromide."
1213	19*	for " *α-nitrite* " read " *α-di(methylamino)-nitrite*."
1214	10—11	*delete* " of Magnus's salt."
1596		*for*  *read* 

* From bottom.

*List of Physico-chemical Symbols adopted by the Chemical Society.**

[See J.C.S., 1921, **119**, 502—512.]

1. *Mathematical Symbols.*

	Usual symbol.	Alternative symbol.
Base of natural (Napierian) logarithms	e	
Diameter	d	
Radius	r	
Ratio of circumference to diameter	π	
Summation	Σ	
Variation	δ	
Total differential	d	
Partial differential	∂	

2. *Universal Constants.*

Acceleration due to gravity	g	
Mechanical equivalent of heat	J	
Avogadro's constant [number of molecules in 1 gram-molecule (mole)]	N	
Gas constant per mole	R	
Faraday's constant (number of coulombs per gram-equivalent of an ion)	F	
Charge on an electron	e	

3. *General Physics and Chemistry.*

Length	l	
Height	h	
Mass	m	
Time	t	
Volume	v, V	
Density (mass per unit volume)	d	D
Pressure	p, P	
Concentration	c, C	
Mole fraction	x	
Critical constants: pressure, volume, temperature (centigrade), temperature (absolute), density	p_c, v_c, t_c, T_c, d_c	
Reduced quantities: pressure, volume, temperature, density	p_r, v_r, t_r, T_r, d_r	
van der Waals' constants	a, b	
Fluidity	ϕ	
Viscosity	η	
Surface tension	γ	σ
Diffusion coefficient	Δ	
Atomic weight	A	
Molecular weight	M	
Velocity coefficient of reaction	k	
Equilibrium constant	K, (K_c, K_p)	
van 't Hoff coefficient	i	
Degree of dissociation (electrolytic, thermal, etc.)	α	

4. *Heat and Thermodynamics*

Temperature (centigrade)	t	0
Temperature (absolute)	T	
Critical temperature	t_c, T_c	
Reduced temperature	t_r, T_r	

* This list will shortly be extensively revised.

4. *Heat and Thermodynamics*—(continued).

	Usual symbol.	Alternative symbol.
Critical solution temperature	t_{cs}, T_{cs}	
Quantity of heat	Q	
Entropy	S	
Specific heat	c	
Specific heat at constant pressure	c_p	
Specific heat at constant volume	c_v	
Ratio of specific heats, $c_p : c_v$	γ	
Molecular heat	C	
Molecular heat at constant pressure	C_p	
Molecular heat at constant volume	C_v	
Latent heat per gram	l	
Latent heat per mole	L	
Maximum work (diminution of free energy)	A	

5. *Optics.*

Wave-length of light	λ	
Refractive index	n	n
Specific refractive power (Gladstone and Dale)	r_G, $[r_G]^{t^\circ}_\lambda$	
Specific refractive power (Lorentz and Lorenz)	r_L, $[r_L]^{t^\circ}_\lambda$	
Molecular refractive power	R_G, R_L, $[R_G]^{t^\circ}_\lambda$, $[R_L]^{t^\circ}_\lambda$	
Angle of optical rotation	α	
Specific rotatory power	$[\alpha]$	
Molecular rotatory power	$M[\alpha]$	
Specific magnetic rotation	$[\omega]$	
Molecular magnetic rotation	$M[\omega]$	

6. *Electricity and Magnetism.*

Quantity of electricity	Q	
Current intensity	I	
Resistance	R	W
Electromotive force	E	
Electrode potential, or discharge potential of an ion	E	ε
Electrode potential referred to the normal hydrogen or normal calomel electrode respectively, the potential of which is taken as zero	E_h, E	ε_h, ε
Normal potential, *i.e.*, the electrode potential referred to the normal hydrogen or normal calomel electrode respectively, when the solution is molecular-normal in respect of all participating substances and ions of variable concentration	${}_0E_h$, ${}_0E_c$	${}_0\varepsilon_h$, ${}_0\varepsilon$
Dielectric constant	ε	
Conductivity (specific conductance)	κ	
Equivalent conductivity	Λ	
Equivalent conductivity at different dilutions—volumes in litres containing 1 gram-equivalent	Λ_{10}, Λ_v, $\Lambda\infty$	
Equivalent conductivity of cation and of anion	Λ_k, Λ_a	
Equivalent conductivity of specified ions	Λ_K, Λ_{Cl}	
Molecular conductivity	μ	
Velocity of cation and of anion in cm./sec. when the potential gradient is 1 volt per cm.	U_k, U	
Transport number of cation and of anion	n_k, n_a	
Magnetic permeability	μ	
Magnetic susceptibility	κ	

List of Symbols, Arranged Alphabetically.

Symbol.	Name of quantity.
A	Atomic weight; maximum work.
a	Van der Waals' constant.
b	Van der Waals' constant.
C	Concentration; molecular heat.
c	Concentration; specific heat.
C_p, C_v	Molecular heat at constant pressure, and at constant volume.
c_p, c_v	Specific heat at constant pressure, and at constant volume.
D	Alternative symbol for density.
d	Diameter; total differential; density.
d_c	Critical density.
δ	Reduced density.
E	Electromotive force; electrode potential.
e	Base of Napierian logarithms; charge on an electron.
E_h, E_c	Electrode potential referred to the normal hydrogen or the normal calomel electrode, respectively, the potential of which is taken as zero.
${}_0E_h$, ${}_0E_c$	Normal potential, that is, the electrode potential referred to the normal hydrogen or the normal calomel electrode respectively, when the solution is molecular-normal in respect of all participating substances and ions of variable concentration.
F	Faraday's constant (number of coulombs per gram-equivalent of an ion).
g	Acceleration due to gravity.
h	Height.
I	Current.
i	Van 't Hoff coefficient.
J	Mechanical equivalent of heat.
K	Equilibrium constant.
K_c, K	Equilibrium constant, when molar concentrations and partial pressures respectively are employed.
k	Velocity coefficient of reaction.
L	Latent heat per mole.
l	Length; latent heat per gram.
M	Molecular weight.
$M[\alpha]$	Molecular rotatory power.
$M[\omega]$	Molecular magnetic rotatory power.
m	Mass.
N	Avogadro's constant (Loschmidt's number) or number of molecules in 1 gram-molecule.
n	Refractive index.
n_k, n_a	Transport number of cation and of anion.
n_r	Refractive index (alternative symbol).
P	Pressure.
p	Pressure.
p_c, p_r	Critical pressure: reduced pressure.
Q	Quantity of heat; quantity of electricity.
R	Gas constant per mole; electrical resistance.
R_G, R_L	Molecular refractive power, according to Gladstone and Dale, and to Lorentz and Lorenz respectively.
r	Radius.
r_G, r_L	Specific refractive power according to Gladstone and Dale, and to Lorentz and Lorenz respectively.
S	Entropy.
T	Absolute temperature.
T_c	Critical temperature (on the absolute scale).
T_r	Reduced temperature (absolute).
T_{cs}	Critical solution temperature (absolute).
t	Time; temperature (centigrade).
t	Critical temperature (centigrade).
t_{cs}	Critical solution temperature (centigrade).
t_r	Reduced temperature (centigrade).
U_k, U_a	Velocity of cation and of anion in cm./sec. when the potential gradient is 1 volt per cm.
V	Volume.
v	Volume.
v_c, v_r	Critical volume: reduced volume.

List of Symbols, Arranged Alphabetically—(continued).

Symbol.	Name of quantity.
W	Electrical resistance (alternative symbol).
$\varkappa$	Mole fraction.
α	Degree of dissociation (electrolytic, thermal, etc.); angle of optical rotation.
$[\alpha]$	Specific rotatory power.
γ	Surface tension; ratio of specific heats.
Δ	Diffusion coefficient.
δ	Variation.
∂	Partial differential.
ε	Electrode potential (alternative symbol); dielectric constant.
ε_h, ε	Electrode potential referred to the normal hydrogen or the normal calomel electrode respectively, the potential of which is taken as zero (alternative symbols).
${}_0\varepsilon_h$, ${}_0\varepsilon$	Normal potential, that is, the electrode potential referred to the normal hydrogen or the normal calomel electrode respectively, when the solution is molecular-normal in respect of all participating substances and ions of variable concentration (alternative symbols).
η	Viscosity.
θ	Temperature (centigrade), (alternative symbol).
κ	Specific conductance (conductivity); magnetic susceptibility.
Λ	Equivalent conductivity.
Λ_{10}, Λ_v, $\Lambda\infty$	Equivalent conductivity at different dilutions (volumes in litres containing 1 gram-equivalent).
Λ_k, Λ_a	Equivalent conductivity of cation and of anion.
λ	Wave-length of light.
μ	Molecular conductivity; magnetic permeability.
π	Ratio of circumference to diameter.
Σ	Summation.
σ	Surface tension (alternative symbol).
ϕ	Fluidity.
$[\omega]$	Specific magnetic rotation.

ADDITIONS TO THE LIBRARY OF THE CHEMICAL SOCIETY DURING THE YEAR 1935.

ACTA PHYSICOCHIMICA U.R.S.S. Vol. I, etc. Moscow 1934 +. (*Reference.*)

ALDIS, R. W. *See* INDIAN LAC RESEARCH INSTITUTE.

ALEXANDER, W. B. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Water Pollution Research.* Technical Paper No. 5.

ALLSOP, G. *See* MINES DEPARTMENT. *Safety in Mines Research Board.* Papers Nos. 89 and 91.

ALTMAN, REINOUT FERDINAND ALEXANDER. Contribution à l'étude des médicaments de synthèse contre la malaria. Delft 1935. pp. 182. ill.

ALUMINUM COMPANY OF AMERICA. Chemical analysis of aluminum. New Kensington, Pa. 1935. pp. 83.

AMERICAN PETROLEUM INSTITUTE. A report on fundamental research in petroleum. New York 1932. pp. 56. ill.

AMERICAN PUBLIC HEALTH ASSOCIATION and ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. Standard methods of milk analysis, bacteriological and chemical. 6th edition. New York 1934. pp. xiv + 105. ill.

ANGERER, ERNST VON. Apparate und Methoden der Spektroskopie. (Handbuch der Experimentalphysik, 21, pp. 205–396.) Leipzig 1927. ill.

ARMSTRONG, E. F., and ARMSTRONG, K. F. The carbohydrates. 5th edition. (Monographs on Biochemistry.) London 1934. pp. viii + 252.

ARMSTRONG, K. F. *See* ARMSTRONG, E. F.

ASSOCIATION OF BRITISH CHEMICAL MANUFACTURERS. British chemicals and their manufacturers. London 1935. pp. 459. (*Reference.*)

ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. *See* AMERICAN PUBLIC HEALTH ASSOCIATION.

AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research.* Bulletin No. 83. Natural pastures: their response to superphosphate. By J. G. DAVIES, A. E. SCOTT, and K. M. FRASER. Melbourne 1934. pp. 76. ill.

—— —— Bulletin No. 84. The basal (standard) metabolism of the Australian merino sheep—II. By A. W. PEIRCE. Melbourne 1934. pp. 22.

AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research.* Bulletin No. 85. Studies on the phosphorus requirements of sheep. II. By H. R. MARSTON [and others]. Melbourne 1934. pp. 22. ill.

—— —— Bulletin No. 86. A soil survey of the Berri, Cobdogla, Kingston, and Moorbrook irrigation areas, and the Lyrup village district, South Australia. By T. J. MARSHALL and P. D. HOOPER. Melbourne 1935. pp. 55. ill.

—— —— Bulletin No. 92. The apple-growing soils of Tasmania. By C. G. STEPHENS and J. K. TAYLOR. Melbourne 1935. pp. 55. ill.

—— —— Pamphlet No. 49. Some important poison plants of North Australia. Compiled by the Poison Plants Committee. Melbourne 1934. pp. 44. ill.

—— —— Pamphlet No. 51. The chemistry of Australian timbers. Part 4.—A study of the lignin determination. ii. By W. E. COHEN. Melbourne 1934. pp. 20. ill.

—— —— Pamphlet No. 53. The identification of wood by chemical means. Part II. By W. E. COHEN. Melbourne 1935. pp. 23.

—— —— Pamphlet No. 55. The selection, preservation, distribution, and identification of Australian pole timbers. By J. E. CUMMINS and H. E. DADSWELL. Melbourne 1935. pp. 79. ill.

—— —— Pamphlet No. 57. Tests of the efficacy of the oxy-acetylene scouring and charring process for sterilising partly decayed poles. By J. E. CUMMINS. Melbourne 1935. pp. 43. ill.

AYKROYD, W. R. Three philosophers (Lavoisier, Priestley and Cavendish). London 1935. pp. xii + 277. ill.

BARKER, A. S. The use of fertilizers. A guide to the manuring of crops in Great Britain. London 1935. pp. x + 204.

BARONI, A. *See* LEVI, GIORGIO RENATO.

BARRY, T. HEDLEY, and DUNSTER, GEORGE WILLIAM. Varnish making. London [1934]. pp. xii + 132. ill.

BASLE, SOCIETY OF CHEMICAL INDUSTRY. [Fifty years' history] 1884–1934. Basle 1934. pp. 85. ill.

BASSINGDALE, R. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Water Pollution Research.* Technical Paper No. 5.

BECHHOLD, H. [and others]. Einführung in die Lehre von den Kolloiden. Dresden 1934. pp. viii + 160. ill.

BELL, R. P. *See* FALKENHAGEN, HANS.

BENYON, C. E. *See* INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Technical Publications. Series D. No. 1.

BERG, RICHARD. Das o-Oxychinolin "Oxin." (Die chemische Analyse. Vol. XXXIV.) Stuttgart 1935. pp. viii + 94. ill. (*Reference.*)

BERGE, JACOB VAN DEN. Beoordeeling van de waarde van fungicide stoffen voor houtconserveering. Delft 1934. pp. 185.

BERL, ERNST. [Editor.] Chemische Ingenieur-Technik. 3 vols. Berlin 1935. pp. xxiv + 874, xvi + 795, xvi + 580. ill.

BERN. *Eidg. Gesundheitsamt.* Mitteilungen aus dem Gebiete der Lebensmitteluntersuchung und Hygiene. Vol. XXIV, etc. Bern 1933 +. (*Reference.*) [Vol. xxiv *incomplete.*]

BERZELIUS, JÖNS JACOB. Autobiographical notes. Published by the Royal Swedish Academy of Sciences through H. G. SÖDERBAUM. Translated by OLOF LARSELL. Baltimore 1934. pp. xii + 194. ill.

BEUKEMA, TAMMO RIENKO ANTON. De ontwikkeling van het begrip valentie. Leiden 1935. pp. viii + 159. ill.

BEUKERS, MARTIEN CHRISTIAAN FREDERIK. Fotografische ontwikkelaars. Delft 1934. pp. 161. ill.

BHATTACHARYA, R. *See* INDIAN LAC CESS COMMITTEE. *London Shellac Research Bureau.* Technical Papers Nos. 1, 2, and 5.

BIEDERMANN, H. Recherches sur la compression et la décomposition de l'oxyde d'azote. Paris 1926. pp. 27. ill.

BILLITER, JEAN. Prinzipien der Galvanotechnik. Wien 1934. pp. iv + 326. ill.

BILLITER, JEAN RENÉ. L'action de l'ammoniac et des amines sur les éthers glycidiques. Paris 1935. pp. 99.

BOAS, W. *See* SCHMID, ERICH.

BOEHMER, JAN WILLEM. Aliphatische isocyanaten en hun omzetting in N.aryl-N'.alkylurea. Leiden 1935. pp. xii + 121. ill.

BOER, J. H. DE. Electron emission and adsorption phenomena. Translated by MRS. H. E. TEVES-ACLY. Cambridge 1935. pp. xii + 398. ill.

BOMSKOV, CHRISTIAN. Methodik der Vitaminforschung. Leipzig 1935. pp. xvi + 301. ill.

BORN, MAX. Atomic physics. Translated by JOHN DOUGALL. London 1935. pp. xii + 352. ill.

BRADY, F. L. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Building Research.* Bulletin No. 6.

BRAGG, SIR WILLIAM H. *See* INSTITUTE OF CHEMISTRY OF GREAT BRITAIN AND IRELAND.

BRANNT, WILLIAM T. *See* DAWIDOWSKY, F.

BRENNECKE, E. [and others]. Neuere massanalytische Methoden. (Die chemische Analyse. Vol. XXXIII.) Stuttgart 1935. pp. xii + 211. ill. (*Reference.*)

BRENNERT, SVEN. *See* INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Technical Publications. Series D. No. 2.

BRETAGNE, ROBERT. Synthèses de bases phénylées et biphénylées. Lausanne 1925. pp. 31.

BRISTOL, UNIVERSITY OF. *Fruit and Vegetable Preservation Research Station, Campden.* Annual Report 1933–34, etc. Campden, Glos. 1935 +. (*Reference.*)

BRITAIN'S FUEL PROBLEMS. Edited by E. C. EVANS [and others]. London 1930–31. pp. xvi + 592. ill.

BRITISH PLASTICS YEAR BOOK 1935. The handbook and guide to the plastics industry. London 1935. pp. 717. ill. (*Reference.*)

BRITISH SCIENCE GUILD. Gas defence. By J. DAVIDSON PRATT. London 1935. pp. 14.

—— The electron liberated: its industrial consequences. By CLIFFORD C. PATERSON. London 1935. pp. 16. ill.

BRITISH STANDARDS INSTITUTION. British Standard Specifications. No. 593—1935. General purpose laboratory thermometers.

—— —— No. 604—1935. Graduated measuring cylinders.

—— —— No. 605—1935. Crow receivers.

—— —— No. 611—1935. Petri dishes.

—— —— No. 612—1935. Nessler cylinders.

—— —— No. 616—1935. Sampling of coal tar and its products.

—— —— No. 619—1935. Laboratory incubator, water bath, and oven thermometers.

—— —— No. 622—1935. Cyanides (classes A and B) suitable for electroplating. London 1935. pp. 19.

—— —— No. 625—1935. Bacteriological test tubes, Durham fermentation tubes and Dreyer agglutination tubes.

—— —— No. 627—1935. Sampling of fats and fatty oils in packages or in bulk.

—— —— No. 628—1935. Coconut oil.

—— —— No. 629—1935. Ground nut oil.

—— —— No. 630—1935. Olive oil.

—— —— No. 631—1935. Rape seed oil.

—— —— No. 632—1935. Raw linseed oil for general purposes.

BROOME, DONALD C. The testing of bituminous mixtures: a laboratory handbook concerning road and building materials. With a chapter on roofing felts by R. O. CHILD. London 1934. pp. viii + 194. ill.

BROSE, HENRY L. *See* SOMMERFELD, ARNOLD.

BROWN, SAMUEL. Lectures on the atomic theory and essays scientific and literary. 2 vols. Edinburgh 1858. pp. xii + 357, iv + 384.

BRYAN, J. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Forest Products Research*. Record No. 3.

BULLETIN OF SERICULTURE AND SILK INDUSTRY. *See* IMPERIAL COLLEGE OF SERICULTURE AND SILK-INDUSTRY.

BUTLER, J. A. V. The fundamentals of chemical thermodynamics. 2nd edition. Part I. London 1935. pp. xvi + 253. ill.

BYERS, HORACE G. *See* UNITED STATES. *Department of Agriculture*. Technical Bulletins Nos. 430, 471, and 482.

CAMERON, H. K. *See* ZIMMER, FRITZ.

CANADA. *Dominion Bureau of Statistics*. Mining, Metallurgical and Chemical Branch. Chemicals and allied products in Canada, 1933. Ottawa 1935. pp. 141. (*Reference.*)

CAVENDISH, HON. HENRY. *See* AYKROYD, W. R.

CEYLON. *Coconut Research Scheme*. Bulletin No. 1. Report on the soap industry in Ceylon. By R. CHILD. [Lunuwila] 1934. pp. vi + 45.

CHILD, REGINALD. *See* CEYLON. *Coconut Research Scheme*. Bulletin No. 1.

CHILD, R. O. *See* BROOME, DONALD C.

CHILDS, W. H. J. Physical constants: selected for students. London 1934. pp. viii + 77.

CLARKE, S. G. *See* INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Technical Publications. Series A. No. 7.

COE, MAYNE R. *See* UNITED STATES. *Department of Agriculture*. Circular No. 329.

COHEN, W. E. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research*. Pamphlets Nos. 51 and 53.

COLD SPRING HARBOR. *Biological Laboratory*. Symposia on quantitative biology. Vol. I. Cold Spring Harbor 1933. pp. xii + 239. ill. (*Reference.*)

COWGILL, GEORGE R. The vitamin B requirement of man. New Haven 1934. pp. xx + 261. ill.

CRUMP, LETTICE M. *See* CUTLER, D. WARD.

CUMMINS, J. E. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research*. Pamphlets Nos. 55 and 57.

CUTLER, D. WARD, and CRUMP, LETTICE M. Problems in soil microbiology. London 1935. pp. viii + 104. ill.

DADSWELL, H. E. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research*. Pamphlet No. 55.

DAVIES, J. G. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research*. Bulletin No. 83.

DAWIDOWSKY, F. Glue, gelatine, animal charcoal, phosphorus, cements, pastes, and mucilages. 2nd edition. Edited by WILLIAM T. BRANNT. Philadelphia 1905. pp. xvi + 282. ill. (*Reference.*)

DAWSON, T. R., and PORRITT, B. D. Rubber: physical and chemical properties. Croydon 1935. pp. xii + 700. ill.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. Chromium steels. By RICHARD HENRY GREAVES. London 1935. pp. vi + 321. ill.

—— Report of test . . . on the plant of the British Coal Distillation Company, Ltd., at Newbold, Leicestershire. Test carried out March 1933. London 1935. pp. iv + 29. ill.

—— Review of oxidation and scaling of heated solid metals. London 1935. pp. viii + 104. ill.

—— *Building Research*. Bulletin No. 6. The prevention of corrosion of lead in buildings. 2nd edition. By F. L. BRADY. London 1935. pp. iv + 4. ill.

—— —— Technical Paper No. 16. The quaternary system CaO–Al_2O_3–SiO_2–Fe_2O_3 in relation to cement technology. By F. M. LEA and T. W. PARKER. London 1935. pp. viii + 52. ill.

—— *Chemistry Research Board*. Report for the period ended 31st December 1934, etc. London 1935 +.

—— *Forest Products Research*. Record No. 3. (Wood Preservation Series No. 1.) Experiments on the preservation of mine timber. Progress report No. 1. By J. BRYAN and N. A. RICHARDSON. London 1935. pp. 10. ill.

—— *Fuel Research*. Physical and chemical survey of the national coal resources, No. 35. The Yorkshire, Nottinghamshire, and Derbyshire coalfield. West Yorkshire area. The Beeston group of coals. Upper Beeston seam. Part I. London 1935. pp. vi + 103. ill.

—— —— Technical Papers Nos. 40 and 41. The hydrogenation-cracking of tars. Part I. Preliminary experiments. Part II. The preparation of a catalyst. London 1935. pp. viii + 107, vi + 17. ill.

—— —— Technical Paper No. 43. Further experiments upon the water-gas process. By J. G. KING, B. H. WILLIAMS, and R. V. THOMAS. London 1935. pp. 58. ill.

—— *Lubrication Research*. Technical Paper No. 2. A study of the boundary lubricating value of mineral oils of different origin. By M. E. NOTTAGE. London 1934. pp. iv + 32. ill.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Road Research Board.* Report for the period ended 31st March, 1935, etc. London 1935 +. (*Reference.*)

—— *Water Pollution Research.* Technical Paper No. 5. Survey of the River Tees. Part II. The estuary–chemical and biological. By W. B. ALEXANDER, B. A. SOUTHGATE, and R. BASSINDALE. London 1935. pp. xiv + 171. ill.

DESCH, C. H. *See* LEA, F. M.

DHAR, N. R. *See* INDIA. *Society of Biological Chemists.*

DIXON, H. B. *See* MINES DEPARTMENT. *Safety in Mines Research Board.* Paper No. 93.

DIXON, S. M. *See* MINES DEPARTMENT. *Safety in Mines Research Board.* Paper No. 92.

DOLE, MALCOLM. Principles of experimental and theoretical electrochemistry. New York 1935. pp. xiv + 549. ill.

DOUGALL, JOHN. *See* BORN, MAX.

DUBOIS, PIERRE. Contribution à l'étude des oxydes du manganèse. Paris 1935. pp. iv + 72. ill.

DULFER, GERRITJE. Onderzoekingen over kwalitatieve analyse. Delft 1935. pp. 183.

DUNSTER, GEORGE WILLIAM. *See* BARRY, T. HEDLEY.

EBERT, ERICH. Optische Untersuchungen ungesättigter organischer Verbindungen. Weida i Th. 1910. pp. 99. ill.

EDGINGTON, GLEN. *See* UNITED STATES. *Department of Agriculture.* Technical Bulletin. No. 471.

EGYPTIAN MEDICAL ASSOCIATION. Journal. Vols. XI–XV. Cairo 1928–32. (*Reference.*)

ELAM, C. F. (Mrs. G. H. Tipper.) Distortion of metal crystals. Oxford 1935. pp. xiv + 182. ill.

ELSNER, HORST. *See* TOLLENS, B. C. G.

ERGEBNISSE DER ENZYMFORSCHUNG. Edited by F. F. NORD and R. WEIDENHAGEN. Vol. I, etc. Leipzig 1932 +. (*Reference.*)

EVANS, E. C. *See* BRITAIN'S FUEL PROBLEMS.

EVEREST, ARTHUR E. *See* INSTITUTE OF CHEMISTRY OF GREAT BRITAIN AND IRELAND.

EXELL, H. C. *See* HOLLINGS, H.

FALKENHAGEN, HANS. Electrolytes. Translated by R. P. BELL. Oxford 1934. pp. xvi + 347. ill.

FARADAY SOCIETY. Colloidal electrolytes: a general discussion. London 1935. pp. iv + 422. ill.

FARKAS, ADALBERT. Orthohydrogen, parahydrogen and heavy hydrogen. Cambridge 1935. pp. xiv + 215. ill.

FEDERATED MALAY STATES. *Institute for Medical Research.* Bulletin No. 1 of 1934. Studies in vitamin B.1 (the antineuritic vitamin). Part II. The "oryzatoxin" theory. By I. A. SIMPSON. Kuala Lumpur 1934. pp. iv + 24. ill.

—— —— Bulletin No. 2 of 1934. Lectures on the development and use of the synthetic anti-malarial drugs. By RICHARD GREEN. Kuala Lumpur 1934. pp. iv + 50.

FEDERAZIONE NAZIONALE FASCISTA DEGLI INDUSTRIALI DEI PRODOTTI CHIMICI. Bollettino d'Informazioni. Supplemento a "La chimica e l'industria." Vol. I, etc. Roma 1935 +. (*Reference.*)

FEIGL, FRITZ. Qualitative Analyse mit Hilfe von Tüpfelreaktionen. 2nd edition. Leipzig 1935. pp. xii + 513.

FIELD, SAMUEL, and WEILL, A. DUDLEY. Electroplating: a survey of modern practice, including nickel, zinc, cadmium, and chromium. 2nd edition. London 1935. pp. x + 256. ill.

FIERZ-DAVID, HANS EDUARD. Künstliche organische Farbstoffe. Ergänzungsband. Berlin 1935. pp. vi + 136. ill.

FILBY, FREDERICK A. A history of food adulteration and analysis. London 1934. pp. 269. ill.

FINDLAY, ALEXANDER. The spirit of chemistry. 2nd edition. London 1934. pp. xvi + 510. ill.

FINLEY, GEORGE H. [Editor.] The handbook of butane-propane gases. 2nd edition. Los Angeles 1935. pp. 321 + [v]. ill.

FISHER, E. A. *See* NATIONAL JOINT COUNCIL FOR THE FLOUR MILLING INDUSTRY.

FISHER, R. A. Statistical methods for research workers. 5th edition. Edinburgh 1934. pp. xvi + 319 + vi tables. ill.

[FORBES, R. J.] The story of bitumen from the earliest times up to the nineteenth century. [1935.] pp. 63. ill.

FOWLER, GILBERT J. *See* INDIA. *Society of Biological Chemists.*

FRANKLIN, EDWARD CURTIS. The nitrogen system of compounds. (American Chemical Society Monograph Series.) New York 1935. pp. 339. ill.

FRASER, K. M. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research.* Bulletin No. 83.

FREUNDLICH, HERBERT. The chemistry of rubber. London 1935. pp. xii + 72. ill.

FREY-WYSSLING, A. Die Stoffausscheidung der höheren Pflanzen. Berlin 1935. pp. xii + 378. ill.

FRIEND, G. E. The schoolboy. A study of his nutrition, physical development and health. Cambridge 1935. pp. xii + 128. ill.

FRIEND, JOHN NEWTON. A text-book of physical chemistry. Vol. II. Principles involved in chemical reactivity. London 1935. pp. xii + 483. ill.

FROMHERZ, HANS. *See* KING, ALEXANDER.

FUCHS, O. *See* HAND- UND JAHRBUCH DER CHEMISCHEN PHYSIK.

GAADE, WILLEM. Derivaten van aethyleen-1 : 2-dioxaminezuur. Delft 1935. pp. 173.

GERLACH, WALTHER, and GERLACH, WERNER. Clinical and pathological applications of spectrum analysis. Being the authorised translation of part II of "Die chemische Emissionsspektralanalyse." Translated by JOYCE HILGER TWYMAN. London 1934. pp. 143. ill.

GERLACH, WERNER. *See* GERLACH, WALTHER.

GLASSTONE, S., and HICKLING, A. Electrolytic oxidation and reduction : inorganic and organic. (Monographs on Applied Chemistry.) London 1935. pp. x + 420. ill.

GLOVER, P. M. *See* INDIAN LAC RESEARCH INSTITUTE.

GOLDSMITH, J. N. Alexander Parkes, Parkesine, xylonite, and celluloid. London 1934. pp. vi + 55. ill. (*Reference.*) [In mimeograph form.]

GRAHAM, JOSEPH IVON. *See* HALDANE, JOHN SCOTT.

GREAVES, RICHARD HENRY. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH.

GREEN, RICHARD. *See* FEDERATED MALAY STATES. *Institute for Medical Research.* Bulletin No. 2 of 1934.

GREGORY, THOMAS C. *See* HERSTEIN, KARL M.

GRIFFITH, R. H. *See* HOLLINGS, H.

GRIGNARD, V. *See* TRAITÉ DE CHIMIE ORGANIQUE.

GROGGINS, P. H. [Editor-in-Chief.] Unit processes in organic synthesis. New York 1935. pp. xii + 689. ill.

GROSSFELD, J. *See* TOMBROCK, W.

HAAS, JACOB JOHAN DE. De spreiding en de electrische potentiaal aan grensvlakken. Delft 1935. pp. 119. ill.

HALDANE, JOHN SCOTT, and GRAHAM, JOSEPH IVON. Methods of air analysis. 4th edition. London 1935. pp. viii + 176. ill.

HAMILTON, ALICE. Industrial toxicology. New York 1934. pp. xxii + 329.

HAN, JOHN E. S. Laboratory manual of industrial chemistry : largely based on ALLEN ROGERS's "Laboratory guide of industrial chemistry" [with additions]. Shanghai 1924. pp. xiv + 530. ill. [*In Chinese.*]

HAND- UND JAHRBUCH DER CHEMISCHEN PHYSIK. Vol. VI. Part 1A. Elektronenstrahlen und ihre Wechselwirkung mit Materie. By J. HENGSTENBERG and KARL WOLF. Leipzig 1935. pp. 236 + xii.

—— Vol. VI. Part 1B. Dielektrische Polarisation. By O. FUCHS and K. L. WOLF. Leipzig 1935. pp. x, 237 to 472, 36.

HARROW, BENJAMIN, and SHERWIN, CARL P. A textbook of biochemistry. Philadelphia 1935. pp. 797. ill.

HARTSHORNE, N. H., and STUART, A. Crystals and the polarising microscope. London 1934. pp. viii + 272. ill.

HARVEY, ARTHUR. Laundry chemistry : a manual on the chemistry of laundry materials and methods. 2nd edition. London 1935. pp. viii + 118.

HARVEY, C. O. *See* MEDICAL RESEARCH COUNCIL. Special Report Series, No. 201.

HARWOOD, J. *See* MINES DEPARTMENT. *Safety in Mines Research Board.* Paper No. 93.

HAUGHTON, JOHN L. *See* ROSENHAIN, WALTER.

HÉDERER, CHARLES, and ISTIN, MARC. L'arme chimique et ses blessures. Étude générale sur les gaz de guerre. Paris 1935. pp. 697. ill.

HEDGES, E. S. *See* INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Technical Publications. Series B. No. 2.

HENGSTENBERG, J. *See* HAND- UND JAHRBUCH DER CHEMISCHEN PHYSIK.

HENRIQUEZ, PERCY COHEN. Eenige toepassingen van de diëlectrische constante in de chemie. Delft 1935. pp. 170. ill.

HERSTEIN, KARL M., and GREGORY, THOMAS C. Chemistry and technology of wines and liquors. New York 1935. pp. xii + 360. ill.

HERZOG, RUDOLF. Étude chimique et physiologique des amines à fonction éthylénique et des diamines. Soleure 1934. pp. 44.

HEWITT, L. F. *See* LONDON COUNTY COUNCIL.

HICKLING, A. *See* GLASSTONE, S.

HINCHLEY, EDITH M. John William Hinchley, chemical engineer. A memoir. South Kensington 1935. pp. 142. ill.

HINCHLEY, JOHN WILLIAM. *See* HINCHLEY, EDITH M.

HODGMAN, CHARLES D. [Editor-in-Chief.] Handbook of chemistry and physics : a ready-reference book of chemical and physical data. 20th edition. Cleveland, Ohio 1935. pp. xiv + 1951. (*Reference.*)

HOGAN, M. A. *See* MINES DEPARTMENT. *Safety in Mines Research Board.* Paper No. 92.

HOLLINGS, H. [Editor.] The manufacture of gas. Vol. I. Water gas. By R. H. GRIFFITH. With a section on temperature measurement by H. C. EXELL. London 1934. pp. xvi + 260. ill.

HOMER, C. E. *See* INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Technical Publications. Series B. No. 2.

HONEGGER, PAULA. Untersuchungen über die Absorption ultraroter Strahlen durch organische Substanzen im flüssigen Zustande. Zürich 1926. pp. 96. ill.

HOOGERHEIDE, JOHANNES CORNELIS. Bijdrage tot de kennis van de reactie van Pasteur. Leiden 1935. pp. x + 168. ill.

HOOPER, P. D. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research*. Bulletin No. 86.

HOPKIN & WILLIAMS, LTD. Organic reagents for metals. 2nd edition. London 1934. pp. 197. (*Reference.*)

HOPKINS, ARTHUR JOHN. Alchemy, child of Greek philosophy. New York 1934. pp. xii + 262. ill.

HOWES, DONALD A. *See* NASH, ALFRED W.

HULST, LEONARDUS JOHANNES NICOLAAS VAN DER. Toepassing van absorptiespectra bij chemisch-technisch onderzoek. Delft 1934. pp. 116. ill.

HUNZIKER, OTTO FREDERICK. Condensed milk and milk powder. 5th edition. La Grange, Ill. 1935. pp. xviii + 661. ill.

HURST, L. A. *See* UNITED STATES. *Department of Agriculture*. Circular No. 319.

IMPERIAL CHEMICAL INDUSTRIES. Laundry washing and bleaching. London [1935]. pp. 105. ill.

—— The control of water softening and boiler water conditioning. London [1935]. pp. 35. ill.

—— Water sterilisation. London [1935]. pp. 50.

—— Water treatment. London [1935]. pp. 50.

IMPERIAL COLLEGE OF SERICULTURE AND SILK-INDUSTRY. *Alumni Association*. The Bulletin of Sericulture and Silk-Industry. Sanchi-gaku Zasshi. Vol. II, etc. Uyeda 1930 +. (*Reference.*)

INDIA. *Society of Biological Chemists*. Industrial possibilities of some research work done in India. By GILBERT J. FOWLER. [Bangalore] 1934. pp. iv + 42.

—— —— Influence of light on some biochemical processes. By N. R. DHAR. Bangalore 1935. pp. iv + 73.

INDIAN ACADEMY OF SCIENCES. Proceedings. Vol. I, etc. Bangalore 1934 +. (*Reference.*)

INDIAN LAC CESS COMMITTEE. *London Shellac Research Bureau*. Technical Paper No. 1. Isolation of pure lac resin. By LAL C. VERMAN and R. BHATTACHARYA. London 1934. pp. 21. ill.

—— —— Technical Paper No. 2. Identification and analysis of lac. By R. BHATTACHARYA. London 1935. pp. 28.

—— Technical Papers Nos. 3 and 4. Fundamental physical properties of lac. Parts I and II. By LAL C. VERMAN. London 1935. pp. 28, 20. ill.

—— Technical Paper No. 5. Direct liquid extraction process for pure lac resin. By LAL C. VERMAN and R. BHATTACHARYA. London 1935. pp. 30. ill.

INDIAN LAC RESEARCH INSTITUTE. Lac and the Indian Lac Research Institute. By DOROTHY NORRIS, P. M. GLOVER, and R. W. ALDIS. Calcutta 1934. pp. vi + 53. ill.

INSTITUT INTERNATIONAL DE CHIMIE SOLVAY. Cinquième Conseil de Chimie. Rapports et discussions relatifs à l'oxygène, ses réactions chimiques et biologiques. Paris 1935. pp. xvi + 355. (Two copies.)

INSTITUT INTERNATIONAL DE PHYSIQUE SOLVAY. Septième Conseil de Physique tenu à Bruxelles, 1933. Structure et propriétés des noyaux atomiques. Paris 1934. pp. xxvi + 353. ill. (*Reference.*)

INSTITUTE OF CHEMISTRY OF GREAT BRITAIN AND IRELAND. New indicators and other reagents employed in volumetric analysis. By ALEC DUNCAN MITCHELL. London 1934. pp. 21. ill.

—— Chemistry and the body politic. By SIR WILLIAM H. BRAGG. 7th S.M. Gluckstein Memorial Lecture, 1935. London 1935. pp. 18.

—— Fifty years of chemistry, 1885–1935. By ARTHUR E. EVEREST. London 1935. pp. 20.

—— Quinine manufacture in India. By GEORGE ELLIOTT SHAW. London 1935. pp. 16.

INSTITUTION OF PETROLEUM TECHNOLOGISTS. Petroleum: twenty-five years retrospect, 1910–1935. London 1935. pp. xx + 219. ill.

—— Standard methods for testing petroleum and its products. 3rd edition. London 1935. pp. xii + 228. ill.

INTERNATIONAL SOCIETY OF LEATHER TRADES' CHEMISTS. *British Section*. Technical aspects of emulsions: being the papers read at a symposium. London 1935. pp. viii + 150. ill.

INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Bulletin No. 1. Tinplate and canning in Great Britain. London 1935. pp. 81. ill.

INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Bulletin No. 2. Solder. London 1935. pp. 52. ill.

—— Miscellaneous Publications. No. 4. Tin and its uses. By D. J. MACNAUGHTAN. (From *Modern Uses of Non-Ferrous Metals*, 1935.)

—— —— No. 5. Tin and civilisation. By D. J. MACNAUGHTAN. London 1935. pp. 9.

—— —— Series A. No. 7. The determination of the porosity of tin coatings on steel. By D. J. MACNAUGHTAN, S. G. CLARKE, and J. C. PRYTHERCH. London 1935. pp. 9. ill.

—— —— Series B. No. 2. Equilibrium diagrams of binary alloys of tin. By E. S. HEDGES and C. E. HOMER. London 1935. pp. 90. ill.

—— —— Series D. No. 1. A study of the yellow stain on tinplates. By C. E. BENYON and C. J. LEADBEATER. London 1935. pp. 11. ill.

—— —— Series D. No. 2. Black spots on tin and tinned ware. By SVEN BRENNERT. London 1935. pp. 27.

INTERNATIONAL UNION OF PURE AND APPLIED PHYSICS. Reports on symbols, units, and nomenclature approved by the general assembly of the Union at its meeting in London on 5th October 1934. London 1935. pp. vi + 40. (*Reference.*)

INTERNATIONAL UNION OF PURE AND APPLIED PHYSICS and PHYSICAL SOCIETY. International Conference on Physics, London 1934. Papers and discussions. 2 vols. London 1935. pp. viii + 257, viii + 183. ill. (*Reference.*)

INTERNATIONAL TABELLEN ZUR BESTIMMUNG VON KRISTALLSTRUKTUREN. 2 vols. Berlin 1935. pp. xii + 452, viii, 453 to 692. ill. (*Reference.*)

ISTIN, MARC. *See* HÉDERER, CHARLES.

IVANOVSZKY, LEO. Ozokerit und verwandte Stoffe. 2 vols. [in 3 parts.] Wien 1935. pp. xvi + 192, xx + 360, xii + 124. ill.

JACKSON, PERCY G. Boiler feed water. 3rd edition. London 1935. pp. xii + 166. ill.

JAPAN NICKEL REVIEW. Vol. I, etc. Tokyo 1933 +. (*Reference.*)

JONES, H. E. The life, growth and disintegration of cells, and the decomposition of water and organic material. Glasgow 1935. pp. 86. ill.

JORDAN, H. V. *See* UNITED STATES. *Department of Agriculture.* Technical Bulletin No. 426.

JOURNAL OF METALS. Vol. IV, etc. Okamoto 1934 +. (*Reference.*) [In Japanese.]

KAUSCH, OSCAR. Das Kieselsäuregel und die Bleicherden. Ergänzungsband. Berlin 1935. pp. 114.

KEMP, MARIA. Die ultraviolette Bandenabsorption einiger Biderivate des Benzols. Madgeburg 1916. pp. 36.

KENT-JONES, D. W. The practice and science of breadmaking. Liverpool 1934. pp. viii + 184. ill.

KEUNING, KLAAS JANNES. Dithiaspiroheptaan. Groningen 1934. pp. viii + 92.

KING, ALEXANDER, and FROMHERZ, HANS. German-English chemical terminology: an introduction to chemistry in English and German. London 1934. pp. xvii + 324.

KING, J. G. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Fuel Research.* Technical Paper No. 43.

KLEEF, GERRIT VAN. Derivaten van 2.4-di- en 2.4.5-trimethylaniline. Leiden 1935. pp. viii + 135.

KNAPP, ARTHUR W. The cocoa and chocolate industry. The tree; the bean; the beverage. 2nd edition. London 1930. pp. xii + 188. ill.

KONINKLIJKE AKADEMIE VAN WETENSCHAPPEN TE AMSTERDAM. *Committee for the Study of Viscosity.* First report on viscosity and plasticity. (From the *Verhandel. K. Akad. Wetensch. Amsterdam* (*Section* 1), 1935, 15.) pp. viii + 256. ill.

KOOPMANS, HENDRIK. Bijdrage tot de kennis van het cokesvormingsproces. Wageningen 1935. pp. vi + 91. ill.

KORTUM, G. Das optische Verhalten gelöster Elektrolyte. (Sammlung, N.F. Heft 26.) Stuttgart 1926. pp. 106. ill. (*Reference.*)

KOUSMINE, T. *See* LEBEDEF, PIERRE.

KRÄNZLEIN, GEORG. Werden Sein und Vergehen der künstlichen organischen Farbstoffe. (Sammlung, N.F. Heft 25.) Leipzig 1935. pp. 57.

KRAUSE, ARLINGTON C. The biochemistry of the eye. Baltimore 1934. pp. xvi + 264. ill.

KRONIG, R. DE L. The optical basis of the theory of valency. Cambridge 1935. pp. x + 246. ill.

KYUSHU IMPERIAL UNIVERSITY. *College of Engineering.* Memoirs. Vol. VI, etc. Fukuoka 1931 +. (*Reference.*)

LARDY, GUILLAUME C. Spectres d'absorption ultra-violets de quelques cétènes et de leurs dimères. Paris [1923]. pp. vi + 87. ill.

LARSELL, OLOF. *See* BERZELIUS, JÖNS JACOB.

LAVOISIER, ANTOINE LAURENT. *See* AYKROYD, W. R.

LAXTON, F. C. *See* PRIDEAUX, E. B. R.

LEA, F. M. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Building Research.* Technical Paper No. 16.

LEA, F. M., and DESCH, C. H. The chemistry of cement and concrete. London 1935. pp. xii + 429. ill.

LEADBEATER, C. J. *See* INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Technical Publications. Series D. No. 1.

LEBEDEF, PIERRE. Pression de la lumière. Translated from the Russian by T. KOUSMINE. Paris 1926. pp. 71. ill.

LEVI, GIORGIO RENATO. Chimica. Lezioni tenute nella Facoltá di Medicina e Chirurgia con la collaborazione del A. BARONI. Milano 1935. pp. xii + 482. ill.

LIEBEN, FRITZ. Geschichte der physiologischen Chemie. Leipzig 1935. pp. x + 745.

LLOYD, H. *See* MINES DEPARTMENT. *Safety in Mines Research Board.* Paper No. 91.

LOB, GEORGES. *NN'*-Dibenzyl-aethyleendiamine. Leiden 1935. pp. xvi + 157.

LOMONOSSOW, M. W. Complete works. Vol. VII. Edited by B. N. MENSCHUTKIN. Leningrad 1934. pp. vi + 591. [*In Russian.*]

LONDON COUNTY COUNCIL. Oxidation–reduction potentials in bacteriology and biochemistry. By L. F. HEWITT. 3rd edition. London 1935. pp. 90. ill.

LOWRY, THOMAS MARTIN. Optical rotatory power. London 1935. pp. xiv + 483. ill.

LUCAS, ALFRED. Ancient Egyptian materials and industries. 2nd edition. London 1935. pp. xii + 447.

—— Forensic chemistry and scientific criminal investigation. 3rd edition. London 1935. pp. 376.

LUTZ, G. Gewerbehygiene. Stuttgart 1932. pp. 232.

MAASKANT, LEENDERT. Chloor- en broomnitrophenyl-(methyl)hydrazinen en derivaten. Leiden 1935. pp. xii + 131.

MACNAUGHTAN, D. J. *See* INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Miscellaneous Publications. Nos. 4 and 5; Technical Publications. Series A. No. 7.

MARSH, M. C. Controlled humidity in industry. London 1935. pp. vi + 123. ill.

MARSHALL, C. E. Colloids in agriculture. London 1935. pp. viii + 184. ill.

MARSHALL, I. J. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research.* Bulletin No. 86.

MARSTON, H. R. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research.* Bulletin No. 85.

MARTIN, ARTHUR J. The work of the sanitary engineer. London 1935. pp. xvi + 472. ill.

MASTERS, HELEN. *See* TINKLER, C. KENNETH.

MAUGUIN, CH. La structure des crystaux déterminée au moyen des rayons X. Paris 1924. pp. 281. ill.

MAUMENÉ, E. J. Théorie générale de l'action chimique. Paris 1880. pp. viii + 536. ill.

MEADE, ALWYNE. The new modern gasworks practice. 3rd edition. Vol. I. London 1934. pp. xiv + 492. ill.

MEDICAL RESEARCH COUNCIL. Special Report Series, No. 201. The determination of iodine in biological substances. By C. O. HARVEY. London 1935. pp. 43. ill.

MEES, RUDOLPH HETSERUS. Onderzoekingen over de biersarcina. Groningen 1934. pp. viii + 110. ill.

MEIER, RICHARD. Recherches sur l'ozonation des butylènes. Genève 1929. pp. 84. ill.

MENSCHUTKIN, B. N. Chemistry. 2nd edition. Leningrad 1935. pp. 592. ill. [In Russian.]

—— *See* LOMONOSSOW, M. W.

MEYER, CHARLES F. The diffraction of light, X-rays, and material particles. Chicago 1934. pp. xiv + 473. ill.

MIDDLETON, H. E. *See* UNITED STATES. *Department of Agriculture.* Technical Bulletin No. 430.

MILES, HERBERT W., and MILES, MARY. Insect pests of glasshouse crops. Edited by H. C. LONG. Surbiton 1935. pp. 174. ill.

MILES, MARY. *See* MILES, HERBERT W.

MILLIKAN, ROBERT ANDREWS. Electrons (+ and −), protons, photons, neutrons, and cosmic rays. Chicago 1935. pp. x + 492. ill.

MINES DEPARTMENT. *Safety in Mines Research Board.* Paper No. 89. The ignition of firedamp by broken electric lamp bulbs. The appearance of the filaments. By G. ALLSOP and R. V. WHEELER. London 1935. pp. 15. ill.

—— —— Paper No. 90. The ignition of firedamp by coal-mining explosives. Part II. Sheathed explosives. By C. A. NAYLOR, W. PAYMAN, and R. V. WHEELER. London 1935. pp. 33. ill.

—— —— Paper No. 91. A recording manometer having low inertia. By G. ALLSOP and H. LLOYD. London 1935. pp. 20. ill.

—— —— Paper No 92. The deterioration of haulage ropes in service. By S. M. DIXON and M. A. HOGAN. London 1935. pp. iv + 32. ill.

—— —— Paper No. 93. The ignition of firedamp by compression. By H. B. DIXON and J. HARWOOD. London 1935. pp. 23. ill.

MINISTRY OF HEALTH. Reports on Public Health and Medical Subjects. No. 78. Aluminium in food. By G. W. MONIER-WILLIAMS. London 1935. pp. 34.

MITCHELL, ALEC DUNCAN. *See* INSTITUTE OF CHEMISTRY OF GREAT BRITAIN AND IRELAND.

—— *See* SUTTON, FRANCIS.

MITTEILUNGEN AUS DEM GEBIETE DER LEBENSMITTELUNTERSUCHUNG UND HYGIENE. *See* BERN. *Eidg. Gesundheitsamt.*

MONIER-WILLIAMS, G. W. *See* MINISTRY OF HEALTH. Reports on Public Health and Medical Subjects. No. 78.

MOORE, HAROLD. Liquid fuels: their manufacture, properties, utilisation, and analysis. London 1935. pp. viii + 264. ill.

MORRISON, F. R. *See* PENFOLD, A. R.

MORTON, R. A. The application of absorption spectra to the study of vitamins and hormones. London [1935]. pp. 70. ill.

NAPHTALI, M. Chemie, Technologie und Analyse der Naphthensäuren. Nachtrag 1927–33. Naphthensäuren und Naphthensulfosäuren. Stuttgart 1934. pp. iv + 52.

NASH, ALFRED W., and HOWES, DONALD A. The principles of motor fuel preparation and application. 2 vols. London 1934–35. pp. xiv + 538, xiv + 523. ill.

NATIONAL JOINT INDUSTRIAL COUNCIL FOR THE FLOUR MILLING INDUSTRY. Technical Education Series. Pamphlet No. 3. 2nd edition. Flour quality: its nature and control. By E. A. FISHER. London 1935. pp. 58. ill.

NATIONAL TSING HUA UNIVERSITY. Science Reports. Series A. Mathematical and physical sciences. Vol. I, etc. Peiping 1931 +. (*Reference.*)

NAYLOR, C. A. *See* MINES DEPARTMENT. *Safety in Mines Research Board.* Paper No. 90.

NETHERLANDS. The development of science in the Netherlands during the last half century. Leiden 1930. pp. viii + 102. ill.

NEW, RANDAL G. A. *See* WEISSBERGER, ARNOLD.

NEWBURY, N. F. The teaching of chemistry. London 1934. pp. xii + 247. ill.

NIERENSTEIN, MAXIMILIAN. A missing chapter in the history of organic chemistry: the link between elementary analysis by dry-distillation and combustion. (From *Isis*, 1934, 21.)

NIERENSTEIN, MAXIMILIAN, and PRICE, FRANCES M. The identity of the manuscript entitled "Mr. Nortons worke, *de lapide ph'orum*" with the Ordinall of alchimy. (From *Isis*, 1934, 21.)

NORD, F. F. *See* ERGEBNISSE DER ENZYMFORSCHUNG.

NORRIS, DOROTHY. *See* INDIAN LAC RESEARCH INSTITUTE.

NOTTAGE, M. E. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Lubrication Research.* Technical Paper No. 2.

OFFICE INTERNATIONAL DE CHIMIE. Répertoire international des centres de documentation chimique. Paris [1935]. pp. 115. (*Reference.*)

O'LEARY, M. J. *See* UNITED STATES. *Department of Commerce.* National Bureau of Standards. Miscellaneous Publication M150.

OLIVIER, HERMAN COENRAAD. Bescherming van het onderstel eener zuigermachine tegen de veranderlijke reacties van het draaimoment. Delft 1935. pp. 88. ill.

PACILLY, CHARLES CORNELIUS PETRUS. Inwerking van aliphatische isocyanaten op hydrazine-derivaten. Leiden 1935. pp. xii + 86.

PARKER, T. W. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Building Research.* Technical Paper No. 16.

PARKES, ALEXANDER. *See* GOLDSMITH, J. N.

PARRY, ERNEST JOHN. Shellac: its production, manufacture, chemistry, analysis, commerce and uses. London 1935. pp. xii + 24. ill.

PARSONS, T. R. Fundamentals of biochemistry in relation to human physiology. 5th edition. Cambridge 1935. pp. xii + 453. ill.

PARTINGTON, J. R. Origins and development of applied chemistry. London 1935. pp. xii + 597.

PATERSON, CLIFFORD C. *See* BRITISH SCIENCE GUILD.

PATTERSON, AUSTIN M. A German–English dictionary for chemists. 2nd edition. New York 1935. pp. xx + 411. (*Reference.*)

PAULING, LINUS, and WILSON, E. BRIGHT. Introduction to quantum mechanics with applications to chemistry. New York 1935. pp. xiv + 468. ill.

PAYMAN, W. *See* MINES DEPARTMENT. *Safety in Mines Research Board.* Paper No. 90.

PEIRCE, A. W. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research.* Bulletin No. 84.

PENFOLD, A. R., and MORRISON, F. R. Australian tea trees of economic value. Part I. (Revised edition.) (*Sydney Technological Museum Bulletin*, No. 14.) 1934. pp. 15. ill.

PENNEY, W. G. The quantum theory of valency. London 1935. pp. viii + 95. ill.

PHYSICAL SOCIETY. Reports on progress in physics. [Vol. I.] London 1934. pp. iv + 371. ill. (*Reference.*)

—— *See* INTERNATIONAL UNION OF PURE AND APPLIED PHYSICS.

PHYSIKALISCHE ZEITSCHRIFT DER SOWJETUNION. Vol. I, etc. Charkow 1932 +. (*Reference.*)

PILCHER, RICHARD BERTRAM. The profession of chemistry. 3rd edition. London 1935. pp. viii + 104.

PITT, ROBERT. The craft and frauds of physik expos'd. London 1702. pp. [xx] + 192. (*Reference.*)

PLATZMANN, C. R. International dictionary of cement : English–French–German–Spanish. London [1935.] pp. iv + 66. (*Reference.*)

POHLMANN, CARL WILHELM. Verdringing van de methoxy-benzoyl-groep bij de nitratie van di-methoxy-benzophenonen. Leiden 1935. pp. xii + 107.

POOL, GIJSBERTUS MARINUS. Quantitatieve absorptiebepaling in het ultraviolet. Utrecht 1925. pp. vi + 52. ill.

PORRITT, B. D. *See* DAWSON, T. R.

PRATT, J. DAVIDSON. *See* BRITISH SCIENCE GUILD.

PRETZ, KARL. Die ultraviolette Absorption einiger Diderivate des Benzols. Bonn 1915. pp. 40.

PRICE, FRANCES M. *See* NIERENSTEIN, MAXIMILIAN.

PRIDEAUX, E. B. R., and LAXTON, F. C. A laboratory course in elementary chemistry. London 1935. pp. xiv + 258. ill.

PRIESTLEY, JOSEPH. *See* AYKROYD, W. R.

PROSKAUER, ERICH. *See* WEISSBERGER, ARNOLD.

PRUPPACHER, HANS. Recherches sur le cracking et la chloruration de ses produits. Genève 1925. pp. 36. ill.

PRYTHERCH, J. C. *See* INTERNATIONAL TIN RESEARCH AND DEVELOPMENT COUNCIL. Technical Publications. Series A. No. 7.

RICE, F. O., and RICE, K. K. The aliphatic free radicals. Baltimore 1935. pp. 204. ill.

RICE, K. K. *See* RICE, F. O.

RICHARDSON, N. A. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Forest Products Research.* Record No. 3.

ROBINSON, W. O. *See* UNITED STATES. *Department of Agriculture.* Technical Bulletin No. 471.

ROGERS, ALLEN. *See* HAN, JOHN E. S.

RONALD, DAVID. Handbook on offensive trades. Edinburgh 1935. pp. xvi + 204. ill.

ROSENHAIN, WALTER. Introduction to the study of physical metallurgy. 3rd edition. Revised and partly re-written by JOHN L. HAUGHTON. London 1935. pp. xvi + 368. ill.

ROSENTHALER, LEOPOLD. Toxikologische Mikroanalyse. Qualitative Mikrochemie der Gifte u. a. gerichtlich-chemisch wichtiger Stoffe. Berlin 1935. pp. viii + 368. ill.

ROYAL COMMISSION ON SEWAGE DISPOSAL. 15 vols. of Reports. 1902–13.

SAUER, EBERHARD. Kolloidchemisches Praktikum. Berlin 1935. pp. x + 112. ill.

SCARLATA, GIUSEPPE. Il sesso negli atomi. Palermo 1935. pp. 13.

SCHMID, ERICH, and BOAS, W. Kristallplastizität, mit besonderer Berücksichtigung der Metalle. Berlin 1935. pp. x + 373. ill.

SCHMIDT, JÜRGEN. Das Kohlenoxyd. Seine Bedeutung und Verwendung in der technischen Chemie. Leipzig 1935. pp. viii + 235. ill.

SCHMITT, HANS. Die elektrische Oxydation des Aluminiums. (From the *Hauszeit. V.A.W.u. Erftwerk Aluminium*, 1932, 4.)

SCHNORF, PAUL. Recherches sur l'ozonation des hydrocarbures gazeux non saturés. Paris 1928. pp. 108. ill.

SCHOU, SVEND AAGE. Structure et activation des molécules des aldéhydes aliphatiques, analysées par les spectres d'absorption. Paris 1928. pp. vi + 128. ill.

SCHWARZ, HEINRICH. Die Mikrogasanalyse und ihre Anwendung. Wien 1935. pp. xii + 286. ill.

SCONZO, ANTONINO. Principî teorici e consigli pratica d'analisi chimica qualitativa inorganica. Sulmona 1935. pp. xiv + 276. ill.

SCOTT, A. E. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research.* Bulletin No. 83.

SEMENOFF, N. Chemical kinetics and chain reactions. Oxford 1935. pp. xii + 480. ill.

SEVAUX, ALFRED. L'action élective des dérivés polyarsenicaux sur la trypanosomose experimentale a *Trypanosoma congolense.* Paris 1935. pp. 111.

SEWIG, RUDOLF. Die lichtelektrischen Eigenschaften von Thalliumzellen. (From the *Z. techn. Physik*, 1930, 11.)

SHAW, GEORGE ELLIOTT. *See* INSTITUTE OF CHEMISTRY OF GREAT BRITAIN AND IRELAND.

SHAW, M. B. *See* UNITED STATES. *Department of Commerce.* National Bureau of Standards. Miscellaneous Publication M150.

SHERWIN, CARL P. *See* HARROW, BENJAMIN.

SIDDIQUI, RAFAT HUSSAIN. Chemical examination of the roots of *Rauwolfia Serpentina* (Benth.) with special reference to its alkaloidal constituents. Delhi 1934. pp. viii + 40. ill.

—— Studies in the alkaloids of *Holarrhena Antidysenterica.* Delhi 1934. pp. [17].

SIMPSON, I. A. *See* FEDERATED MALAY STATES. *Institute for Medical Research.* Bulletin No. 1 of 1934.

SIVADJIAN, J. Contribution a l'étude des médicaments antithermiques. Paris 1935. pp. 96. ill.

SKINNER, J. J. *See* UNITED STATES. *Department of Agriculture.* Technical Bulletin No. 452.

SKUDERNA, A. W. *See* UNITED STATES. *Department of Agriculture.* Circular No. 319.

SLATER, C. S. *See* UNITED STATES. *Department of Agriculture.* Technical Bulletins Nos. 430 and 461.

SLOOFF, GOVERT. Cyclische aethers gevormd door condensatie van pyrocatechol met aldehyden en ketonen. Delft 1935. pp. 120.

SNYDER, E. F. *See* UNITED STATES. *Department of Agriculture.* Circular No. 56.

SOCIEDAD QUIMICA DEL PERU. Boletin. Vol. I, etc. Lima 1934 +. (*Reference.*)

SÖDERBAUM, H. G. *See* BERZELIUS, JÖNS JACOB.

SOMMERFELD, ARNOLD. Atomic structure and spectral lines. Translated from the 5th German edition by HENRY L. BROSE. 3rd edition. Vol. I. London 1934. pp. xii + 675. ill.

SOUTHGATE, B. A. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Water Pollution Research.* Technical Paper No. 5.

SPEAKMAN, J. C. An introduction to the modern theory of valency. London 1935. pp. viii + 157.

SPÉE, JOHANNES SIGBERTUS VICTOR JOSEPHUS. Theoretische beschouwingen over het wasschen van steenkolen. Delft 1935. pp. 83. ill.

STEPHENS, C. G. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research.* Bulletin No. 92.

STEWART, ALAN W. A manual of practical chemistry for public health students. 3rd edition. London 1935. pp. xiv + 121. ill.

STUART, A. *See* HARTSHORNE, N. H.

STUART, H. A. Molekülstruktur. Berlin 1934. pp. x + 389.

SUTTON, FRANCIS. A systematic handbook of volumetric analysis. 12th edition. By A. D. MITCHELL. London 1935. pp. xvi + 631. ill.

TABLES ANNUELLES DE CONSTANTES ET DONNÉES NUMERIQUES. Vol. X. Year 1930. Part 1. Paris 1934. pp. xlii + 633. (*Reference.*)

TAYLOR, FRANK SHERWOOD. Inorganic and theoretical chemistry. 3rd edition. London 1935. pp. xiv + 832. ill.

TAYLOR, J. K. *See* AUSTRALIA, COMMONWEALTH OF. *Council for Scientific and Industrial Research.* Bulletin No. 92.

TELLEGEN, FRANCISCUS PHILIPPUS ANTONIUS. Dioxaan en derivaten. Delft 1934. pp. 147.

TEVES-ACLY, MRS. H. E. *See* BOER, J. H. DE.

THOMAS, R. V. *See* DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Fuel Research.* Technical Paper No. 43.

THOMSON, JOHN. An introduction to atomic physics. London 1935. pp. x + 288. ill.

THORPE, SIR EDWARD. Dictionary of applied chemistry. Supplement. By JOCELYN FIELD THORPE and MARTHA ANNIE WHITELEY. Vol. II. London 1935. pp. xx + 727. ill. (*Reference.*)

THORPE, JOCELYN FIELD. *See* THORPE, SIR EDWARD.

TINKLER, C. KENNETH, and MASTERS, HELEN. Applied chemistry. 3rd edition. Vol. I. London 1935. pp. xii + 296. ill.

TIPPER, MRS. G. H. *See* ELAM, C. F.

TOLLENS, B. C. G. Kurzes Handbuch der Kohlenhydrate. 4th edition. By HORST ELSNER. Leipzig 1935. pp. xxii + 627.

TOMBROCK, W. Chemische Stofferklärung. Eine einfache Erklärung physikalischer und chemischer Naturerscheinungen nach chemischer Denkweise. Translated by J. GROSSFELD. Leipzig 1934. pp. 30.

TRAITÉ DE CHIMIE ORGANIQUE. Publié sous la direction de V. GRIGNARD. Vol. I. Paris 1935. pp. xx + 1149. ill. (*Reference.*)

TWYMAN, JOYCE HILGER. *See* GERLACH, WALTHER.

UNITED STATES. *Department of Agriculture.* Circular No. 56. Methods for determining the hydrogen-ion concentration of soils. Revised edition. By E. F. SNYDER. Washington 1935. pp. 47. ill.

—— —— Circular No. 319. Fertilizer studies with sugar beets in the Arkansas Valley area, Colo., 1921–28. By L. A. HURST and A. W. SKUDERNA. Washington 1934. pp. 20. ill.

—— —— Circular No. 329. Manufacture, composition, and utilization of dairy by-products for food. By MAYNE R. COE. Washington 1934. pp. 15. ill.

—— —— Technical Bulletin No. 426. The relation of fertilizers to the control of cotton root rot in Texas. By H. V. JORDAN [and others]. Washington 1934. pp. 75. ill.

—— —— Technical Bulletin No. 430. The physical and chemical characteristics of the soils from the erosion experiment stations—second report. By H. E. MIDDLETON, C. S. SLATER, and H. G. BYERS. Washington 1934. pp. 62. ill.

—— —— Technical Bulletin No. 452. Experiments with nitrogen fertilizers on cotton soils. By J. J. SKINNER [and others]. Washington 1934. pp. 28. ill.

UNITED STATES. *Department of Agriculture.* Technical Bulletin No. 461. Base exchange and related properties of the colloids of soils from the erosion experiment stations. By C. S. SLATER and H. G. BYERS. Washington 1934. pp. 19.

—— —— Technical Bulletin No. 471. Chemical studies of infertile soils derived from rocks high in magnesium and generally high in chromium and nickel. By W. O. ROBINSON, GLEN EDGINGTON, and H. G. BYERS. Washington 1935. pp. 28.

—— —— Technical Bulletin No. 482. Selenium occurrence in certain soils in the United States. By HORACE G. BYERS. Washington 1935. pp. 47.

—— *Department of Commerce.* National Bureau of Standards. Supplement to Circular C398. Standard samples issued or in preparation. Washington 1935. pp. 11.

—— —— —— Miscellaneous Publication M150. Suitability of sweetpotato starch for the beater sizing of paper. By C. G. WEBER, M. B. SHAW, and M. J. O'LEARY. Washington 1935. pp. 7.

—— *Department of the Interior.* Bureau of Mines. Information Circular. No. 6814, etc. Washington 1935 +. (*Reference.*)

—— —— —— Reports of Investigations. No. 3243, etc. Washington 1934 +. (*Reference.*)

—— *National Safety Council.* Final report of the Committee, Chemical and Rubber Sections on benzol. 1926. pp. 128. ill.

[UNITED STATES] NATIONAL FIRE PROTECTION ASSOCIATION. *Committee on Flammable liquids.* Fire hazard properties of certain flammable liquids, gases and volatile solids. Revised edition. Boston, Mass. 1935. pp. 44.

UNITED STEEL COMPANIES, LTD. Standard methods of analysis of iron, steel, and ferro-alloys. Sheffield 1933. pp. 35.

UNIVERSAL OIL PRODUCTS COMPANY. U.O.P. Booklets. Chicago 1923 +. [*Incomplete.*]

—— *Research Laboratories.* Library Bulletin of Abstracts. Vol. X, etc. Chicago 1935 +. (*Reference.*)

VERMAN, LAL C. *See* INDIAN LAC CESS COMMITTEE. *London Shellac Research Bureau.* Technical Papers Nos. 1, 3, 4, and 5.

WALTER, EMIL. Die Absorptionsbandenspektren von Gasen und Dämpfen. Zürich 1924. pp. 83. ill.

WASER, ERNST. Ueber Derivate des Cyclooctans. Zürich 1911. pp. 94. ill.

WEBER, C. G. *See* UNITED STATES: *Department of Commerce.* National Bureau of Standards. Miscellaneous Publication M150.

WEHMER, CARL. Die Pflanzenstoffe. Ergänzungsband. Nachträge aus den Jahren 1930—1934. Jena 1935. pp. iv + 244.

WEIDENHAGEN, R. *See* ERGEBNISSE DER ENZYMFORSCHUNG.

WEILL, A. DUDLEY. *See* FIELD, SAMUEL.

WEISSBERGER, ARNOLD, and PROSKAUER, ERICH. Organic solvents: physical constants and methods of purification. Translated by RANDAL G. A. NEW. Oxford 1935. pp. vi + 212.

WHEELER, R. V. *See* MINES DEPARTMENT. *Safety in Mines Research Board.* Papers Nos. 89 and 90.

WHITELEY, MARTHA ANNIE. *See* THORPE, SIR EDWARD.

WILLIAMS, B. H. See DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. *Fuel Research.* Technical Paper No. 43.

WILSON, E. BRIGHT. *See* PAULING, LINUS.

WINKLER, L. W. Ausgewählte Untersuchungsverfahren für das chemische Laboratorium. Part II. (Die chemische Analyse, Vol. XXXV.) Stuttgart [1935]. pp. viii + 159. ill. (*Reference.*)

WOLF, KARL. *See* HAND- UND JAHRBUCH DER CHEMISCHEN PHYSIK.

WOLF, K. L. *See* HAND- UND JAHRBUCH DER CHEMISCHEN PHYSIK.

WYCKOFF, RALPH W. G. The structure of crystals. Supplement of 1930–34 to the 2nd edition. (American Chemical Society Monograph Series.) New York 1935. pp. 240. ill.

ZAAIJER, WILLEM HENDRIK. De snelheid van de benzilzuur-omzetting en van de reactie van Cannizzaro. Leiden 1935. pp. xiv + 125.

ZAVODSKAYA LABORATORIYA. Vol. III, etc. Moscow 1934 +. (*Reference.*)

ZIMMER, FRITZ. Nitrocellulose ester lacquers: their composition, application and uses. Translated by H. K. CAMERON. London 1934. pp. xiv. + 246. ill.

PRINTED IN GREAT BRITAIN BY RICHARD CLAY & SONS, LIMITED, BUNGAY, SUFFOLK.